
Subject: Re: printing to postscript with PV_WAVE
Posted by [thompson](#) on Thu, 01 Apr 1993 15:04:46 GMT
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worth@acuson.com (Douglas Worth) writes:

> Does anyone know of an easy way to print the plot that you have
> on your X-display? I know how to plot to Postscript, but my real
> problem is those times when you work on adding little things to
> plots and then want a hard copy and there is no way to just
> zap what is already on the screen. Any help would be appreciated.

The following will do the trick.

```
IMAGE = TVRD(0,0, !D.X_SIZE, !D.Y_SIZE) ;Read window as image
TVLCT, RED, GREEN, BLUE, /GET ;Get color table
SET_PLOT, 'PS' ;Select PostScript
;
; Most color PostScript printers don't seem to be able to plot all the way to the
; edge. Therefore, I make the area available for use by IDL somewhat smaller
; in the long dimension of the paper. The following shows the settings I use
; for landscape and portrait modes.
;
DEVICE, /LANDSCAPE, /COLOR, /INCHES, YOFFSET=9.75, XSIZE=8.5, BITS_PER_PIXEL=8
;
; or
;
;DEVICE, /PORTRAIT, /COLOR, /INCHES, XOFFSET=0.75, YOFFSET=1.25, $
; XSIZE=7.0, YSIZE=8.5, BITS_PER_PIXEL=8
;
TVLCT, RED, GREEN, BLUE ;Load color table
TV, IMAGE ;Display image of window
SET_PLOT, 'X' ;Return to X-windows
```

You might want to play with the offset and size parameters to suit yourself.

Bill Thompson

Subject: Re: printing to postscript with PV_WAVE
Posted by [dieh2133](#) on Fri, 02 Apr 1993 18:54:50 GMT
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I am not sure whether all implementations of X have xpr and xwd (utilities to dump and print X-windows.) but if You have it You might try something like the following procedure which I use to dump a window on my hp9k345 to my hp-paintjet. If You change the options for xpr and lp that should work for any printer.

; TUB, Rolf Diehl; Tue Dec 17 21:20:39 MEZ 1991

pro xwd,nu

```
;dump window to the paintjet
```

```
;
```

```
;nu number or the WAVE window
```

```
;-----
```

```
windowname="
```

```
case n_params() of
```

```
0:begin
```

```
  print,'Enter name of window to dump? '
```

```
  read>windowname
```

```
end
```

```
1: windowname='WAVE '+strtrim(string(nu),2)
```

```
endcase
```

```
spawn,"xwd -name '"+windowname+" | xpr -device pjet | lp -dpaint -oraw -onb "
```

```
end
```

```
--
```

Mit freundlichen Gruessen

Rolf Diehl.

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Subject: Re: printing to postscript with PV_WAVE
Posted by [laa](#) on Thu, 08 Apr 1993 16:44:41 GMT

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In article <1993Mar31.172224.21830@acuson.com>, worth@acuson.com (Douglas Worth) wrote:

>

> Does anyone know of an easy way to print the plot that you have
> on your X-display? I know how to plot to Postscript, but my real
> problem is those times when you work on adding little things to
> plots and then want a hard copy and there is no way to just
> zap what is already on the screen. Any help would be appreciated.

>

A couple of responses followed this posting. Here's my two bits:

Bill Thompson suggested using TVRD to read the image off the Wave-generated X-Window, and then plotting the image to a Postscript file. Unfortunately,

this closes the X server connection, and any other Wave windows with it.

Rolf Diehl suggested using xwd, xpr and lp. This is a more general approach, and has the advantage of being able to dump non-Wave windows as well. Unfortunately, xpr is limited to at best a 4x4 dither representation of color to a monochrome printer. It won't deal with color PS printers. Also, I have been unable to render large windows, either by spreading them across printed pages (-split n), or by scaling them (-scale n).

I've been looking at other alternatives, too. I've considered a variant of Bill's method which would use DC_WRITE_TIFF instead of switching to postscript. Then the tiff-printer (perhaps from Sam Loeffler's stuff?) could be spawned. Again, this would require some contortions to print a non-Wave window.

I guess the ideal solution would be to find a xwd-format to PostScript-format converter. This would be similar to Rolf's solution, but would avoid the weaknesses of xpr.

Does anyone know of such a utility?

Lee Ankeny
Los Alamos National Laboratory
laa@lanl.gov

Subject: Re: printing to postscript with PV_WAVE
Posted by [thompson](#) on Thu, 08 Apr 1993 21:26:13 GMT
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laa@lanl.gov (Lee Ankeny) writes:

> In article <1993Mar31.172224.21830@acuson.com>, worth@acuson.com (Douglas
> Worth) wrote:

>>
>> Does anyone know of an easy way to print the plot that you have
>> on your X-display? I know how to plot to Postscript, but my real
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> A couple of responses followed this posting. Here's my two bits:

> Bill Thompson suggested using TVRD to read the image off the Wave-generated
> X-Window, and then plotting the image to a Postscript file. Unfortunately,
> this closes the X server connection, and any other Wave windows with it.

Funny, this doesn't happen in IDL, not even when called from inside a widget.

For the record, this is the method I use in IDL.

```
IMAGE = TVRD(0,0,!D.X_SIZE,!D.Y_SIZE) ;Read window into an array
TVLCT, RED, GREEN, BLUE, /GET ;Get current color tables
SET_PLOT, 'PS' ;Use PostScript device
TVLCT, RED, GREEN, BLUE ;Load color tables
TV, IMAGE ;Display image of window
SET_PLOT, 'X' ;Go back to X-windows
```

Note: Because most color printers seem to cut off the top and bottom portions of the page, I usually use the following DEVICE statement for landscape orientation.

```
DEVICE, /LANDSCAPE, /COLOR, /INCHES, YOFFSET=9.75, XSIZE=8.5, $
BITS_PER_PIXEL=8, FILENAME=...
```

Bill Thompson

Subject: Re: printing to postscript with PV_WAVE
Posted by [dieh2133](#) on Wed, 14 Apr 1993 17:20:15 GMT
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In article <laa-080493100153@berserk.c3.lanl.govL>, laa@lanl.gov (Lee Ankeny) writes:

|>
|> I guess the ideal solution would be to find a xwd-format to
|> PostScript-format converter. This would be similar to Rolf's solution, but
|> would avoid the weaknesses of xpr.
|>
|> Does anyone know of such a utility?

|>
Th pbm-package (portable-bitmap) includes a xbmtopbm converter, but I do not know about a converter from pbm to postscript, but there are several other converters for printers which might as well do the trick.

--
Mit freundlichen Gruessen
Rolf Diehl.

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|_____
