Subject: Re: How to get page size for PRINTER device?
Posted by Liam E. Gumley on Tue, 05 Dec 2000 08:00:00 GMT
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Liam Gumley <Liam.Gumley@ssec.wisc.edu> wrote in message
news:90gscjnfq1@news.doit.wisc.edu...
>
> Liam Gumley <Liam.Gumley@ssec.wisc.edu> wrote in message
> news:90gni1$e5a$1@news.doit.wisc.edu...
>> According to the IDL 5.4 documentation:
>>
>> "The DIALOG_PRINTERSETUP function opens a native dialog for setting the
>> applicable properties for a particular printer."
>>
>> Let's say I've selected the PRINTER graphics device, and I've called
>> DIALOG_PRINTERSETUP to change the paper size from Letter to A4, e.g.
>>
>> IDL> set_plot, 'PRINTER'
>> IDL> result = dialog_printersetup()
>>
>> Is there any way to return the new page size to an IDL application? I'm
>> talking about the actual width and height of the paper (i.e. 21.0 x 29.7
> cm
>> for A4), not the dimensions of the drawable area on the page (17.78 x
12.7
>> cm by default).
>> Even if one uses a printer object, I don't see how the paper size can be
>> obtained.
>
> Well apparently you can get the page size from the PRINTER device. But the
> results are not what I expected. The following example shows the result of
a
> test I did in IDL 5.4 for Windows. The default printer is an Epson Stylus
> Color 600.
>
> IDL Version 5.4 (Win32 x86). (c) 2000, Research Systems, Inc.
>
> The default PRINTER device settings:
>
> IDL> set_plot, 'PRINTER'
> IDL> help, /device
> Available Graphics Devices: CGM HP METAFILE NULL PCL PRINTER PS WIN Z
> Current graphics device: PRINTER
>   Printer : EPSON Stylus COLOR 600
>   Orientation: Portrait
>   Scale Factor: 1
>   Resolution: 361 dots per inch
>   Current Font: Courier New, Current TrueType Font: <default>

>   Size (X,Y): (17.78,12.7) cm., (7,5) in.
>   Offset (X,Y): (1.905,12.7) cm., (0.75,5) in.
> IDL> device, get_page_size=page_size   ; This command gets the page size
> IDL> print, page_size[0] / !d.x_px_cm, page_size[1] / !d.y_px_cm
>   20.9000   26.2000
>
> Now I call the printer configuration dialog, and select 'Letter 8.5 x 11'
> explicitly:
>
> IDL> result = dialog_printersetup()
> IDL> device, get_page_size=page_size
> IDL> print, page_size[0] / !d.x_px_cm, page_size[1] / !d.y_px_cm
>   20.9000   26.2000
>
> 8.5 x 11 in. converts to 21.59 x 27.94 cm. Hmmm.
>
> For the next case, I selected 'Legal 8.5 x 14':
>
> IDL> result = dialog_printersetup()
> IDL> device, get_page_size=page_size
> IDL> print, page_size[0] / !d.x_px_cm, page_size[1] / !d.y_px_cm
>   20.9000   33.8000
>
> 8.5 x 14 in. converts to 21.59 x 35.56 cm. Curiouser.
>
> For the final case, I selected 'A4 210 x 297 mm':
>
> IDL> result = dialog_printersetup()
> IDL> device, get_page_size=page_size
> IDL> print, page_size[0] / !d.x_px_cm, page_size[1] / !d.y_px_cm
>   20.4000   28.0000
>
> Once again, the page size returned differs from the actual page size.
> Perhaps the returned value is a printer-dependent 'printable area' of the
> page.

According to RSI technical support:

"The printer device can not print on the entire page. There is a small
margin (which varies from printer to printer) on each side of the page. The
GET_PAGE_SIZE keyword returns the full area the printer device is capable of
using.

For example, when your paper size was 8.5 X 11 inches (21.59 X 27.94 cm) the
entire printing area was 8.23 X 10.32 inches (20.9 X 26.2 cm). So your
right/left margin is approximately 0.14 inches and your top/bottom margin is
approximately 0.34 inches."

This may be of interest to anyone trying to configure the PRINTER device for different page sizes.

Cheers,
Liam.
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