
Subject: Re: Postscript line thickness

Posted by [David Fanning](#) on Mon, 19 May 2003 13:34:07 GMT

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Haje Korth (haje.korth@jhuapl.edu) writes:

- > Does anyone know how the value of the line thickness keyword translates to
- > points in the Postscript device. I am getting so tired of having to change
- > all my graphics by hand for publication. Your help out of my misery is
- > greatly appreciated!

I don't know anything about how thickness keywords translate into points, but I do know that doing things by hand is a bit passe in the computer world. :-)

A little bit of foresight goes a long way when writing IDL programs. For example, if you know you have a graphics display program that you are going to want to make a PostScript file of (and aren't *all* of them this way?), then something like this works well:

PRO NicePlot, data

```
IF !D.Name EQ 'PS' OR !D.Name EQ 'PRINTER' THEN BEGIN
```

```
  psthick = 3
```

```
  thick = !P.Thick
```

```
  xthick = !X.Thick
```

```
  ythick = !Y.Thick
```

```
  zthick = !Z.Thick
```

```
  font = !P.Font
```

```
  !P.Thick = psthick
```

```
  !X.Thick = psthick
```

```
  !Y.Thick = psthick
```

```
  !Z.Thick = psthick
```

```
  !P.Font = 0 ; or 1, your choice
```

```
ENDIF
```

```
; Your normal graphics here. For example,  
Plot, data
```

```
IF !D.Name EQ 'PS' OR !D.Name EQ 'PRINTER' THEN BEGIN
```

```
  !P.Thick = thick
```

```
  !X.Thick = xthick
```

```
  !Y.Thick = ythick
```

```
  !Z.Thick = zthick
```

```
  !P.Font = font
```

```
ENDIF
```

```
END
```

If 3 is not the right value, then--at worst--you only have to make a single change in your file. And you could even put the value in as a keyword! :-)

Cheers,

David

--

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

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Postscript line thickness

Posted by [David Fanning](#) on Tue, 20 May 2003 13:16:12 GMT

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Haje Korth (haje.korth@jhupl.edu) writes:

> Actually, this was quite simple: do any plot with the thickness=1 and find
> the point size to be 0.283. The mapping is then the "thickness=point/0.283".

How did you do this? With a micrometer!?

This is a good tip, but I would like to know how this relationship was established in more detail. Once my curiosity is satisfied, I'll write it up. :-)

Cheers,

David

P.S. Let's just say I have a ruler marked in points, inches, and agate for laying out graphical designs, but either my eyes are really old or those points are very small. In either case, I don't think I can make out 0.283!!

--

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Subject: Re: Postscript line thickness
Posted by [K. Bowman](#) on Tue, 20 May 2003 13:33:35 GMT
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In article <MPG.1933d88ba6f49739989ba4@news.frii.com>,
David Fanning <david@dfanning.com> wrote:

> Haje Korth (haje.korth@jhuapl.edu) writes:
>
>> Actually, this was quite simple: do any plot with the thickness=1 and find
>> the point size to be 0.283. The mapping is then the "thickness=point/0.283".
>
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>
> This is a good tip, but I would like to know how
> this relationship was established in more detail.
> Once my curiosity is satisfied, I'll write it up. :-)

When you open a Postscript file in Illustrator and select a line, it displays the properties of the line, including its width.

Ken

Subject: Re: Postscript line thickness
Posted by [Haje Korth](#) on Tue, 20 May 2003 16:35:07 GMT
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David,
Ken got it right. I loaded the postscript file into CorelDRAW and checked the properties of the line. The software gives you the thickness with 3 digit precision. thick=1 gives you 0.283, thick=2 gives you 0.567, however. So you now the number is rounded/truncated. But the precision is accurate enough for the purpose. Does this satisfy your curiosity? :-)

Haje

"David Fanning" <david@dfanning.com> wrote in message
news:MPG.1933d88ba6f49739989ba4@news.frii.com...

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Subject: Re: Postscript line thickness
Posted by [mchinand](#) on Tue, 20 May 2003 19:12:34 GMT
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In article <badlgm\$gpc\$1@houston.jhuapl.edu>,
Haje Korth <haje.korth@jhuapl.edu> wrote:

> David,

> Ken got it right. I loaded the postscript file into CorelDRAW and checked

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> So you now the number is rounded/truncated. But the precision is accurate

> enough for the purpose. Does this satisfy your curiosity? :-)

>

> Haje

>

>

Looking at a IDL generated postscript file in a text editor, it looks like
it's 0.283465. Not that the extra precision matters much. I don't really
know much about postscript programming, just enough to change line
thickness and colors.

--Mike
