
Subject: A whine about default device settings

Posted by [Kenneth P. Bowman](#) on Sat, 09 Feb 2008 21:42:01 GMT

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The new 24-bit Z-buffer device is nice for generating graphics on a device without a display, as is common with servers, for example. It is easier to configure and use than Xvfb, for example.

Unfortunately, some of the default device settings are different between the Z-buffer device and the X-Windows device. (I haven't checked the WIN device because I don't have a Windows machine).

```
IDL> window, xsize=1024, ysize=768
```

```
IDL> help, !d, /str
```

```
** Structure !DEVICE, 17 tags, length=84, data length=84:
```

```
NAME      STRING  'X'
```

```
X_CH_SIZE  LONG      6
```

```
Y_CH_SIZE  LONG     10
```

```
IDL> set_plot, 'z'
```

```
IDL> device, set_resolution = [1024, 768], set_pixel_depth = 24
```

```
IDL> help, !d, /str
```

```
** Structure !DEVICE, 17 tags, length=84, data length=84:
```

```
NAME      STRING  'Z'
```

```
X_CH_SIZE  LONG      8
```

```
Y_CH_SIZE  LONG     12
```

Because IDL scales margins and plot sizes based on the character size, switching devices means that the resulting graphs are not identical, despite identical window/device sizes.

This can be rectified by setting the character size of the Z-buffer device with

```
DEVICE, SET_CHARACTER_SIZE = [6, 10]
```

or doing the reverse for the X-Windows device, but this seems to me to be a pointless and unnecessary device dependence.

I am annoyed enough to post about this because I just spend longer than I should have figuring out why the graphics output from the two devices was not identical.

Ken Bowman
