
Subject: Re: GDL?

Posted by [Michael Wallace](#) on Mon, 21 Mar 2005 22:35:28 GMT

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Might I suggest looking through some posts the last few months with respect to GDL? Version 0.8.8 was announced on this newsgroup last month. I have not used it myself.

<http://groups-beta.google.com/group/comp.lang.idl-pvwave/search?q=gdl&start=0&scoring=d&>

-Mike

>
> So here's the question: has anybody actually used GDL? Someone who has
> used IDL in the past and can give a decent overview over the pros and
> cons? I see the latest GDL version is 4 or 5 months old -- does that
> mean nobody is working on it or that it is stable? What are the major
> incompatibilities (if any)?
>
> Just asking here. Happy about any real information.

Subject: Re: GDL?

Posted by [Benjamin Hornberger](#) on Mon, 21 Mar 2005 23:15:21 GMT

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Y.T. wrote:

>
> So here's the question: has anybody actually used GDL? Someone who has
> used IDL in the past and can give a decent overview over the pros and
> cons? I see the latest GDL version is 4 or 5 months old -- does that
> mean nobody is working on it or that it is stable? What are the major
> incompatibilities (if any)?

I haven't used it myself, but from the posts on this newsgroup I understand:

1. It runs on *nix and Max OS X, but not on Windows
2. It's fully syntax compatible with IDL, i.e. all language constructs are understood.
3. The library is implemented only partially. In particular, no GUI stuff is available yet, and only part of the direct graphics routines.

Benjamin

Subject: Re: GDL?

On Mon, 21 Mar 2005, Y.T. wrote:

- > My employ in the space sciences appears to come to an end soon and
- > with it access to IDL - the single most comfortable tool I've
- > ever used on a computer (for 12 years and counting).

Unless you happen to be a student. IDL recently (a few years ago now?) started supporting an \$99 USD student edition.

- > So I've been looking around and stumbled over "GDL - the Gnu Data
- > Language". It looks like a worthy goal and if it were only 80%
- > compatible with IDL, I'd be more than happy.
- >
- > So here's the question: has anybody actually used GDL?

I used it. I don't use it often, but I keep it installed and up-to-date (via fink (unstable cvs), so it isn't 100% up-to-date) on my OS X boxes. It works fine for me for line plotting and simple math.

- > Someone who has used IDL in the past and can give a decent
- > overview over the pros and cons?

It does not support the MAP_* routines which is the main reason I don't use it much. I haven't done any speed trials in it.

- > I see the latest GDL version is 4 or 5 months old
- No, I think it is *much* more actively developed than that. Maybe a few weeks old?

- > does that mean nobody is working on it or that it is stable?
- The dev team is small AFAIK. It is stable in that I haven't had any crashes with the little bit of usage I have given it. Recent posts by the developer implies it is more stable than IDL. Well, maybe not more stable, but it gracefully handles a few places where IDL segfaults.

- > What are the major incompatibilities (if any)?
- The large chunk (> 20%) of IDL that is not implemented yet.

I hope someday it will support Aqua. Maybe when Marc implements the GUI code he will use wxWidgets? That would be great.

But I think the best way to answer your question is to download and run it. If you cannot for some reason, and would like to send me a test procedure, I'll run it for you.

-k.

--

<http://spacebit.dyndns.org/>

Subject: Re: GDL?

Posted by [wmconolley](#) on Tue, 22 Mar 2005 10:21:20 GMT

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Ken Mankoff <mankoff@gmail.com> wrote:

> I used it. I don't use it often, but I keep it installed and
> up-to-date (via fink (unstable cvs), so it isn't 100% up-to-date) on
> my OS X boxes. It works fine for me for line plotting and simple
> math.

I've built it and played with it a little but not much. I have trouble
with plots: if anyone can tell me the solution to:

```
wmc> plot,[0,1]
```

PLPlot abort handler: plInitDispatchTable: Could not open drivers directory

*** PLPLOT ERROR ***

plInitDispatchTable: Could not open drivers directory, aborting operation
Requested device xwin not available

I'd be grateful. This is from redhat linux BTW.

-W.

--

William M Connolley | wmc@bas.ac.uk | <http://www.antarctica.ac.uk/met/wmc/>
Climate Modeller, British Antarctic Survey | Disclaimer: I speak for myself
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Subject: Re: GDL?

Posted by [Chris Lee](#) on Tue, 22 Mar 2005 13:50:36 GMT

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In article <423ff1a0@news.nwl.ac.uk>, "Unknown" <wmc@bas.ac.uk> wrote:

> Ken Mankoff <mankoff@gmail.com> wrote:
> I've built it and played with it a little but not much. I have trouble
> with plots: if anyone can tell me the solution to: wmc> plot,[0,1]
> PLPlot abort handler: plInitDispatchTable: Could not open drivers
> directory *** PLPLOT ERROR ***

> plInitDispatchTable: Could not open drivers directory, aborting
> operation Requested device xwin not available
> I'd be grateful. This is from redhat linux BTW. -W.

Hi,

Plplot has a number of drivers which (on Debian at least) are distributed as separate packages to the plplot library. From memory, there are xwin, ps, gd, gtk packages. You need the xwin package to plot to the screen.

I don't know what version of plplot you're using but if it's > 5.10 (I think) it should have dynamic loading of the xwin device, which implies it might be a separate package.

Chris.

Subject: Re: GDL?

Posted by [wmconnolley](#) on Wed, 23 Mar 2005 10:25:14 GMT

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"Christopher Lee" <cl> wrote:

> Plplot has a number of drivers which (on Debian at least) are distributed
> as separate packages to the plplot library. From memory, there are xwin,
> ps, gd, gtk packages. You need the xwin package to plot to the screen.

> I don't know what version of plplot you're using but if it's > 5.10 (I
> think) it should have dynamic loading of the xwin device, which implies
> it might be a separate package.

Hmmm... I did build it in a hurry, to see if I could get a built thing that worked, rather than paying attention along the way. So... do I need to look at the Plplot build to check the drivers got built properly?

-W.

--

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Climate Modeller, British Antarctic Survey | Disclaimer: I speak for myself
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Subject: Re: GDL?

Posted by [Ken Mankoff](#) on Wed, 23 Mar 2005 14:17:10 GMT

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On Wed, 23 Mar 2005 wmc@bas.ac.uk wrote:

> "Christopher Lee" <cl> wrote:
>> Plplot has a number of drivers which (on Debian at least) are
>> distributed as separate packages to the plplot library. From
>> memory, there are xwin, ps, gd, gtk packages. You need the xwin
>> package to plot to the screen.
>
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>> 5.10 (I think) it should have dynamic loading of the xwin device,
>> which implies it might be a separate package.
>
> Hmmm... I did build it in a hurry, to see if I could get a built
> thing that worked, rather than paying attention along the way.
> So... do I need to look at the Plplot build to check the drivers
> got built properly?

Yes, that, or switch to a linux distribution that resolves dependencies for you.

-k.

--

<http://spacebit.dyndns.org/>

Subject: Re: GDL?

Posted by [Chris Lee](#) on Thu, 24 Mar 2005 08:45:14 GMT

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In article <4241440a@news.nwl.ac.uk>, "Unknown" <wmc@bas.ac.uk> wrote:

> "Christopher Lee" <cl> wrote:
>> Plplot has a number of drivers which (on Debian at least) are
>> distributed as separate packages to the plplot library. From memory,
>> there are xwin,
>> ps, gd, gtk packages. You need the xwin package to plot to the screen.
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> Hmmm... I did build it in a hurry, to see if I could get a built thing
> that worked, rather than paying attention along the way. So... do I need
> to look at the Plplot build to check the drivers got built properly?
> -W.
>

If you built the PIPlot from source, then you will more than likely need to compile the pl-xwin driver yourself aswell. If you used a packaged

(RPM) pplot I would hope that something resembling a usable core+driver was provided :(Since that doesn't appear to be the case, have a look for the xwin driver as a separate RPM. You probably don't need to change your Linux distribution yet...

On the plus side, you did get it to compile, which means your 90% of the way there.

Chris.

Subject: Re: GDL?

Posted by [wmconnolley](#) on Thu, 24 Mar 2005 16:47:20 GMT

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"Christopher Lee" <cl> wrote:

> If you built the PIPlot from source, then you will more than likely need
> to compile the pl-xwin driver yourself aswell. If you used a packaged
> (RPM) pplot I would hope that something resembling a usable
> core+driver was provided :(Since that doesn't appear to be the case,
> have a look for the xwin driver as a separate RPM. You probably don't
> need to change your Linux distribution yet...

Thanks for the advice. On further poking around, it looks like the problem was the install step, which failed because I didn't have javac available. Re-configuring with --disable-java got round that, and GDL now fails with can't open display when I try to use xwin, which is fair comment since I'm doing this over a modem! Using the ps device instead and then converting to png I get, from plot,[0,1], this:

<http://www.antarctica.ac.uk/met/wmc/gdl.png>

which is a start. Go go GDL!

-W.

--

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Climate Modeller, British Antarctic Survey | Disclaimer: I speak for myself
I'm a .signature virus! copy me into your .signature file & help me spread!
