
Subject: Re: GDL - a little update...

Posted by [marc schellens\[1\]](#) on Sat, 23 Apr 2005 08:04:38 GMT

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First of all I want to state, that from the feedback I get, the installation of GDL seems not to be difficult at all. On most systems people can get it to work (after installing the necessary libraries) without problems.

Y.T. wrote:

- > So I had a look at that, and I am a lot less impressed than I was when
- > I first heard that there is such a thing as a free IDL clone.
- >
- > As far as I can figure out, GDL uses the 'readline' library to receive
- > input from the user, the 'gsl' library to perform the math and 'plplot'
- > to output the result -- in other words, it is really just a parser that
- > connects some other pieces.

There is a lot more in GDL than the libraries could provide. Many parts of the language are part of GDL itself (eg. operators, file IO...).

And GDL is not a parser (even though more than one parsers are part of it). GDL is an incremental compiler and interpreter.

- > Now by itself that isn't a problem, but I do have to wonder about the
- > choice -- why gsl? why plplot?
- >
- > Isn't gnuplot much, much, much more popular? I'm not aware of any
- > current linux distro that doesn't have it -- while the latest plplot
- > rpm for redhat that I can find is for 7.3, and there don't seem to be
- > any newer .debs or slack-tgz's either.

First note that gnuplot isn't a library at all.

And calling one program from another has disadvantages.

While using a library it is much easier to write your own extensions (eg. the TV command in GDL) and work around bugs and limitations. And for example the z-buffer device would be almost impossible with gnuplot, same with managing windows on the x-device.

- > And why gsl? That ain't exactly mainstream either (better than plplot,

> though).

So which better library for mathematical routines do you suggest?

> The more I think about it, the more obvious it appears to me to write
> an IDL clone in python, which is popular and widespread, has it's own
> array-math routines (which compete with IDL's in speed and
versatility)
> and through things like python/Tk or python/gtk even has a native
link
> into the OSes windowing environment.

Great idea! Go ahead. Tell us when your python IDL clone is ready :-)

GDL has an interface to python.

So you could use this 'native link into the OSes' even from GDL via
python.

Just: This doesn't give you IDL source code compatibility...

> Maybe I'm naive about something here. Maybe I'm missing something.

I think one could say so. Ever wrote an interpreter?

> But after three days of failed attempts to get GSL and plplot to
> compile properly ("[error 1]", why thank you for that valuable
> information) on two otherwise perfectly vanilla machines (one RH9 and
> one Slack10) I'm just a little puzzled and maybe just a tad
frustrated.

Most people are able to install GDL.

Please start with the README and INSTALL files of the libraries in
question.

> Well, OK, maybe quite a bit frustrated. ;)

Not a good idea to post immature comments when in such a state.
Especially when having obviously no clue about the matter.

> Why would someone make a current, live, under-development-right-now
> project dependent on things that haven't been included in a distro in
> three years? That require five year old software tools to be built?

Because use whatever suits your needs best.

BTW: Both GSL and plplot are part of debian.

And what five year old software tools are you talking about?

- > Well, I haven't given up yet and I'm still trying -- but this obviously
- > requires a pretty hefty pot of coffee before it'll run anywhere...
- >
- >
- > I'll let y'all know if/when I ever manage to get this working.

If you post your concrete problems to the trackers on the GDL homepage (I think the details are OT here), we might be even able to help you.

Cheers,
marc
