Subject: Re: IDL vs PV-WAVE
Posted by tonyg on Wed, 24 Aug 1994 21:16:27 GMT
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As of last year, one of the biggest differences between IDL and PV-WAVE was the fact that you could not call IDL routines from within a C or Fortran application, something which PV-WAVE allows you to do pretty easily. For instance, if are writing an application in Fortran and have a data array you wish to plot, you can just pass it to PV-WAVE in memory and use one of its plotting routines. With IDL, you would have to store the array to disk, then invoke IDL to read the data and plot it. Perhaps RSI has added such features to IDL recently.

Tony Grusczak
HUGHES Danbury Optical Systems

email: tonyg@hstip.hdos.hac.com

Subject: Re: IDL vs PV-WAVE
Posted by frodes on Thu, 25 Aug 1994 06:53:33 GMT
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tonyg@hdos.hac.com (Tony Grusczak) writes:

> As of last year, one of the biggest differences between IDL and PV-WAVE was the
> fact that you could not call IDL routines from within a C or Fortran application,
> something which PV-WAVE allows you to do pretty easily. For instance, if are
> writing an application in Fortran and have a data array you wish to plot, you can
> just pass it to PV-WAVE in memory and use one of its plotting routines. With IDL,
> you would have to store the array to disk, then invoke IDL to read the data and
> plot it. Perhaps RSI has added such features to IDL recently.

IDL has something called Remote Procedure Calls (RPC) which allows
- - -
IDL to work as a server for other C programs. I have only used this a
couple of times, but as far as I can recall, there was a
function called 'sendcmd', or something like that. This command
would allow C programs to communicate with IDL. So I guess it would
be possible to write a complete IDL program in C.
Why anyone should want do this is, I don't know. But the point
is that you CAN call IDL routines from C, and that this feature
has been around for aleast one year.

--
Regards,

Norwegian Institute for Air Research (NILU)
<Frode.Stenstrom@nilu.no> Postal address: Office address:
Telephone: +47-63 89 80 00 P.O.Box 100 Instituttveien 18
Telefax : +47-63 89 80 50 N-2007 Kjeller Kjeller
Norway

Subject: Re: IDL vs PV-WAVE
Posted by Utermann[1] on Thu, 25 Aug 1994 13:59:43 GMT
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In article <33gdbb$b7f@hacgate2.hac.com>, tonyg@hdos.hac.com (Tony Grusczak) writes:
|> As of last year, one of the biggest differences between IDL and PV-WAVE was the
|> fact that you could not call IDL routines from within a C or Fortran application,
|> something which PV-WAVE allows you to do pretty easily. For instance, if are
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|> you would have to store the array to disk, then invoke IDL to read the data and
|> plot it. Perhaps RSI has added such features to IDL recently.
|>

This can be done both from Fortran and C via Remote Procedure Calls.

--
Ralf Utermann
_____ _____
University of Augsburg (Germany), Institute of Physics
Memmingerstr.6 "Speaking for me and nobody else"
D-86135 Augsburg Phone: +49-821-5977-235
SMTP: Ralf.Utermann@Physik.Uni-Augsburg.DE Fax: -222

Subject: Re: IDL vs PV-WAVE
Posted by candey on Fri, 26 Aug 1994 00:09:00 GMT
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In article <33i3b8$s62@hacgate2.hac.com>, tonyg@hdos.hac.com writes...
> Do the RPC's allow a C program to share data with IDL? Many people I know use
deleted
>> Tony Grusczak
>> HUGHES Danbury Optical Systems
>> email: tonyg@hstip.hdos.hac.com

IDL can be called from within C and Fortran programs (call idl()) and external routines can be called from within IDL (call_external and linkimage). IDL can be run in server mode. Most of these functions were available before the split into PV-WAVE. Not all capabilities are available on all platforms. We've

plotted realtime magnetic field data with IDL called from a Fortran program and we call an orbit-attitude data routine and a triangulation (faster than IDL's routine) routine from IDL using linkimage. Some documentation is online in the IDL installation and others must be requested from RSI.

_____
Bobby Candey NSSDCA::CANDEY
NASA Goddard Space Flight Center, Code 632 candey@nssdca.gsfc.nasa.gov
Greenbelt, MD 20771 USA 1-301-286-6707

Subject: Re: IDL vs PV-WAVE
Posted by grunes on Fri, 26 Aug 1994 12:56:50 GMT
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My 2 cents:

I don't know if it is because our version of PV Wave is a bit out of date, but IDL seems to have a lot more functions to read and write strange image formats. Also, at least on the SGI screen, PV Wave doesn't support true color (24 bit color) mode.

Also, IDL's TEMPORARY function could be a life saver if you have limited memory space, especially if you want to run fast. If PV-Wave has an equivalent, I can't find it. (ANYONE?)

And again they have very different free trial policies: IDL's keeps working, while PV-Wave's dies after 30 days. And when you exceed your license (I hate licenses), IDL falls back into free trial mode, which is fine if you don't need to write files (postscript files CAN be written) or spawn processes; PV Wave waits for someone to sign off.

On the other hand, I do think PV Wave might run slightly faster...

BUT: if you want your code to be portable, make sure it runs under both IDL and PV Wave. Its probably well worth the effort.

Mitchell R Grunes (grunes@imsy1.nrl.navy.mil)
Allied-Signal Technical Services
c/o Code 7230 Naval Research Lab

Subject: Re: IDL vs PV-WAVE
Posted by jacobsen on Fri, 26 Aug 1994 13:23:58 GMT
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In article <777740211.50@p9news.cs.york.ac.uk> dan@p9news (Dan Kustrin) writes:

> Can anyone enlighten me and explain what are the major
> differences in the latest IDL and PV-WAVE and (perhaps)
> which is better (not trying to create a religious war,
> really).

To me a big plus with IDL is that it runs on so many platforms
(vax, unix, MS-Windows, Mac). I even use it on my laptop.

--
Chris Jacobsen, Asst. Prof., Department of Physics, SUNY at Stony Brook
Phone (516) 632-8093, FAX -8101 Bitnet: cjacobsen@sbccmail
jacobsen@xray1.physics.sunysb.edu Stony Brook ALL-IN_ONE: CJACOBSEN
