Subject: Re: idl vs. pv-wave

Posted by Franz. Dollinger on Thu, 24 Jul 1997 07:00:00 GMT

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In article <33D603BD.4FDA@zibmt.uni-ulm.de>, David Ritscher <david.ritscher@zibmt.uni-ulm.de> writes:

>

- > Don't forget to look at MATLAB as another possible choice. They are
- > also making strides now, and it looks like they are adding enough new
- > language features that one could now program a real system within
- > MATLAB (before, there were major deficiencies, such as no 2-D arrays,
- > no integer type, etc.).

After using PV-WAVE a few years I changed the company I'm working for and had to take a look at MATLAB as it was the only available program around for data analysis.

All I encountered was deficiencies. I was really disappointed by the bad performance of MATLAB with every single command I entered. Tens of minutes for a contour plot PV-WAVE needs about half a minute for. When trying to produce a surface plot MATLAB painted every single point in a way a first semester student would implement it as quick and dirty solution. (Of course screwing up the information)

In addition MATLAB needed tons of memory and CPU time, causing me to run it on a machine equipped for doing huge FEM analysis.(I am working on a UNIX workstation most of the time)

When running an application under NT that needed repeated system calls, MATLAB made working on the desktop impossible as it created an iconized DOS-window for every system call deleting every mouse selection or pulldown menu that was activated at that moment.

A collegue had to pre-format data using a C program to make MATLAB work with that data. (he is an experienced programmer)

- > Particularly interesting with MATLAB are the
- > availability of 'compilers' that convert MATLAB code to C or C++ code.

has anyone got experience with the efficiency of the C/C++ code generated by MATLAB? If the performance is like that of MATLAB programs itself one better sticks with C/C+ and appropriate toolboxes.

- > They have also recently added some object-oriented features. My
- > initial impression is that They do not seem to be as strongly
- > integrated into the language as do those of IDL. A major advantage of
- > MATLAB is the rich collection of toolboxes, often written by
- > software has been developed under MATLAB; I can send you references.
- > if that's of interest.

Advantage??? You have to buy a toolbox for every single command PV-WAVE

already integrated (at least in PV-WAVE Advantage)!

Its hard for me to believe that so many people use that program. The performance I experienced was worse than that of a typical MS/Windows program.

And they want real \$\$\$ for that hack. If you buy a license for UNIX the license has to be renewed (=\$\$\$\$) every single year!!

I understand the Windows/PC philosophy to get less quality and less performance for less \$\$\$ making things more affordable. But the price for MATLAB seems (only got second hand info) to be even higher than that of PV-WAVE Advantage (!!!!!!) whith drastically worse performance and much less flexibility. Not talking about the lack of functionality (navigator, wz_plots, data structures, IMSL numerics, ...)

bye Franz

(I never worked with IDL - so I cant comment on that)