Subject: Re: Visual Basic & IDL
Posted by davidf on Fri, 05 Feb 1999 08:00:00 GMT
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Tom Kluegel (kluegel@lanl.gov) writes:

> Does anyone out there have any experience integrating Visual Basic with IDL?
> The mathematical capabilities of IDL are very good, but the GUI side seems
> primitive.

Primitive!? Odd, perhaps. Frustrating, occasionally. But primitive!?
I don't think so.

Anyway, you should contact Matthew Sheets there at Los Alamos.
He has done a lot of work with IDL and Visual Basic and can
certainly give you the low-down.

Cheers,

David

--
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Subject: Re: Visual Basic & IDL
Posted by rivers on Sat, 06 Feb 1999 08:00:00 GMT
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In article <79f8qg$33r$1@nnrp1.dejanews.com>, kluegel@lanl.gov writes:
> Does anyone out there have any experience integrating Visual Basic with IDL?
> The mathematical capabilities of IDL are very good, but the GUI side seems
> primitive. I'm looking into the possibility of somehow taking advantage of
> the strong GUI capability of Visual Basic while using the mathematical and
> visualization capabilities of IDL. We are gearing up to develop a production
> program which may be about 100,000 lines of code. Thanks for any help.

IDL has features under Windows to do exactly this, IDL's ActiveX interface.

We are using this to do exactly what you ask about. The application is an
optical spectrometer for measuring temperature in a laser-heated diamond anvil
cell. The application is structured as follows:

- The GUI is written in Visual Basic. There are 2 graphics windows in the

Visual Basic "form" in which IDL displays plots.
- Visual Basic reads a Princeton Instruments CCD spectrometer using the COM (Component Object Model) interface in the Princeton Instruments software.
- Visual Basic passes the spectra to IDL to calculate temperatures using grey-body models. IDL displays its results graphically in the plot windows in the Visual Basic form.

It sounds complicated, but it's not. It works very well, and takes advantage of the strenghts of each system.

By the way, I highly recommend National Instruments Component Works ActiveX library for Visual Basic. This gives you really nice widgets for numeric input, sliders, etc., plus lots of math routines and nice 2-D plotting widgets. With Component Works you only need to use IDL for the most complex stuff.

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