Subject: Re: IDL verses other interpertative languages (tcl/tk, khouros, pv_wave, etc).
Posted by Peter Mason on Wed, 17 Dec 1997 08:00:00 GMT
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On Tue, 16 Dec 1997, Stuart E. Murray wrote:
<...about writing a Satellite Sensor Simulator>

As much as I like IDL, I don't think that it is the right tool for this kind of task.

I haven't done this sort of thing in IDL, but I think that it may be tricky. You would have to link to an external library (e.g., a Windows DLL) to access data acquisition boards and maybe even parallel/serial ports. (IDL doesn't support port access up front. It may be possible using IDL's I/O or DEVICE routines in some sly way, but I haven't tried.) Real-time may be an issue if you have a fair amount of processing, and it certainly will be a tough issue (perhaps impossible?) if you want to act on interrupts instead of polling things. (And the timer resolution for polling might not be good enough.) And so on.

I have a colleague who is designing software to operate a hyperspectral profile scanner. (He's also designing much of the scanner itself.) Data acquisition, a fair amount of processing, real-time displays, etc. He's using a Windows-based "thing" called LabView. I say "thing" because it's quite unlike any other application I've seen. It's a "graphical programming environment for instrumentation" - one can generate very sophisticated programs with it, without having to type a line of code. Apparently it's very popular for this kind of work. My colleague can't seem to say enough good things about it. Indeed he has quite an evangelical attitude towards it, and wouldn't give up on catching me at teatime and remarking about "LabView" until I had spent a morning with him being (genuinely) impressed by its power and ease-of-use.

I understand that a demo version is available.
Check out: http://www.labview.com

Cheers

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