
Subject: IDL verses other interperative languages (tcl/tk, khourous, pv_wave, etc).

Posted by [Stuart E. Murray](#) on Tue, 16 Dec 1997 08:00:00 GMT

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I am working on a Satellite Sensor Simulator and will require that I display several windows of data. I am trying to sort out what display package might be the best bet. My group currently uses IDL and tcl/tk and I have been asked to considered them since they are in house. I have talked with these folks about both languages and both have strong view points. It is obvious to me that this discussion group will also. But, for the sake of argument. I will pose this question on the tcl discussion group as well.

Has anyone done a pro or con evaluation about IDL (from RSI) verses other languages like tcl/tk?

1. I will have a real-time connection to another embedded machine.
2. There will be one data spigot (be it parallel port, USB, serial port, or network) to the other embedded machine. Does IDL support interfaces such as those or do I have to write my own drivers?
3. Has anyone used IDL in a real-time environment successfully (or unsuccessfully)?
 - 3.1 The display of data in real-time may not be a strong issue if you can throw a lot of horsepower at the problem. However, since IDL is an interperative language, you have to wonder about the impact of performance over straight compiled code? Is this a problem? Is Windows a problem?
4. How hard is it to incorporate C/C++ code into IDL? Literature suggests a thorough knowledge of IDL before attempting this and I don't have that yet.
5. IDL will probably be executed on a Laptop (166 MHz or better) under Win95 or NT (the OS may have a Real-Time exec handler, although there are people that would question a Real-Time exec handler can be done correctly). Other real time OSs might be considered like VxWorks, QNX, etc.
6. IDL learning curve steep?
7. What is the downside of IDL? (bloat code, etc).
8. IDL cost (both for the software & maintenance of code)? How easy is it for someone to come in and pick up where you have left off?

I would appreciate your comments. If this is not the place for this discussion, I apologize for the intrusion.

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