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Subject: Re: IDL procedure to test/cerify IDL routines  
Posted by [JD Smith](#) on Mon, 18 Oct 2004 17:16:58 GMT  
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On Mon, 18 Oct 2004 10:12:37 -0600, David Fanning wrote:

> Reimar Bauer writes:  
>  
>> what is "any possible situation" for you.  
>  
> I think he wants to know if the RSI marketing hype about  
> IDL code being "cross-platform" is really true. I think  
> the honest answer is "Uh, not exactly. Better test like  
> crazy."  
>  
> Cheers,  
>  
> David  
>  
> P.S. Let's just say there are ways to write your programs  
> so that they are \*more\* cross-platform compatible, but  
> even careful coders get surprised more often than you might  
> expect.

It would be interesting to have a list of potential pitfalls for cross-platform compatibility... David? That said, from the obviously-biased point of view of someone who almost never runs anything under Windows (so take this with a grain of salt), I'd say about the only real cross platform issues anymore, assuming you are intelligent about filepaths, are problems with widget layout.

Smart use of things like:

```
files=file_search(filepath(ROOT=some_dir,SUBDIRECTORY='other s','*.txt'))
```

instead of

```
files=file_search(some_dir+'\\'+others+'\\*.txt')
```

will save you lots of trouble. When you need to decompose file strings yourself, use `PATH_SEP()` instead of `'\'`, or `'/'`. Stay away from calls to `SPAWN` (much easier now that IDL offers lots of cross-platform file status and directory listing/search commands internally). Even `DLMs` and `CALL_EXTERNAL` libraries can be automatically built cross-platform (with some amount of up-front effort) -- see `MAKE_DLL`.

Current IDL (V6.x) is much more homogenous than older versions, where

VMS and other vestigial systems were supported. In fact, there are now only two windowing systems still supported: Motif (Linux, Solaris, AIX, IRIX, HP-UX, Mac OSX), and Windows. For the most part, widget layouts designed for any of the Motif systems will work well with any of the other Motif systems (assuming you don't make too many assumptions about font size). Windows is a bit of a separate world, and most layout issues you hear about come from crossing the boundary dividing Windows & Motif.

As a side note, I believe Motif is essentially dead, supported in-house for legacy applications or by proprietary software developers, but less and less deployed on the "frontline" of Unix development. The last widely used Motif application was probably Netscape 4.X, and that, thankfully, is gone the way of the dodo. Even Solaris is moving to GNOME/GTK. My personal view is that GTK+ would be a much more capable target widget set than Motif, and that, at some point, RSI is going to have to bite the bullet and re-target their widgets (or cut off half of their user base, drop cross-platform from their sales pitches, and become a Windows-only program). For this effort they get a much more compelling toolkit, with many more native widget components, and better platform integration. But it's no small task.

JD

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