Subject: Re: Message From RSI VP of Engineering Posted by John-David T. Smith on Wed, 24 Oct 2001 18:56:42 GMT View Forum Message <> Reply to Message

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"Harold Stevens US.972.952.3293" wrote:
>
> In <9r6ob0$6ot$1@sulawesi-fi.lerc.nasa.gov>, Logan Lindquist:
>
> [Snip...]
>
>> I do not know the details of porting stuff that has been written for Linux
>> over to OS X but I wouldn't image that they would be much different, since
>> OS X is based on a Linux kernel.
>
> Not Linux...FreeBSD. Both *nix, of course, but ports 'twixt *nix is not
> a walk in the park, generally. Then there's the whole zealotry thing in
> porting GUIs between *nixen and their distribution sets. For a while it
> seemed as if some Linux diehards would go to war over Gnome vs. KDE for
> crying out loud. Enough of this GUI jihad especially proprietary; where
> the heck is the science and visualization stuff?
>
 Actually, these kernels don't need any GUI (even *nix's X) to operate.
>
  Now, it's true there is considerable experience porting X among *nix.
>
> Speaking for myself Aqua's just another GUI. If RSI would rather modify
> standard X toolkits and build a low(er)cost IDL port, go for it. I will
> use any X interface they might finally offer mainly since beggars can't
> be choosers. Having cut my teeth on Linux in a world infested with dumb
> ideas like proprietary Winmodems, I'm happy when any vendor makes these
> efforts to port functionality to "niche" environments like OS-X.
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I think the most important side-effects of dropping the native OSX version are being completely missed here. I am perfectly comfortable with the X/Motif widgets, which I use everyday... especially since I don't use IDLDE. I suspect most IDL users on OSX would not balk terribly at the foreign-looking interface (inferior as it may be).

The bigger trouble lies under the hood. IDL for MacOSX had some significant optimizations for display and within the core engine itself which are being tossed out with the bath water. The display speed will suffer, since in effect you're running through *two* levels of display (the X level, which translates drawing commands into the native display level). Any use of the much-improved OpenGL OS/hardware support will be impossible. The powerful AltiVec tuning already accomplished or planned for the OSX version will not be included.

Here's a small sampling of a feature table comparison, far from

complete:

IDL feature comparison OSX Native **OSX Straight Unix Port** Interface Agua X/Motif (server required) Fast Slow Display Speed 3D/OpenGL Optimization Yes No Altivec Vectorization Complete None, or limited Separate Core/IDE Threads Yes Pervasive PDF Output Yes No

The bottom line? If you don't care about a non-native interface, your worries aren't over. I welcome corrections to this table (especially by RSI).

I really do like the analogy made by Ron Syml: how would you Windows users like it if RSI told you they didn't want to support your system, and the "solution" was to run an X server with IDL for Unix; how would Unix users like it if they were dropped and told to run a bundled Windows emulation program on top of IDL for Windows? Somehow, I doubt you'd chalk it up to "it's just another GUI, what do I care?"

JD