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Subject: Re: what IDL version should be installed on a 64-bit redhat linux, SGI (MIPS) machine ?

Posted by [Jo Klein](#) on Sun, 25 Jun 2006 17:52:12 GMT

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> We have a SGI (MIPS) machine with 64-bit redhat linux.  
> I installed 64\_bit\_linux\_x86 version of IDL6.2. The SGI machine has

Hi Weihua,

This can't be right - x86 isn't MIPS. I assume you're running one of the Altix systems. In that case, I'm afraid that as far as I know, there's no native IDL for your architecture, and that's what affects your performance. You may be running IDL in hardware emulation, which has a severe penalty on performance.

Get the Intel IA-32 Execution Layer. I think SGI will be able to provide you with a pre-packaged version of this, but you will always lose some performance if you don't run natively. You have to make sure that IDL is started using that emulation layer rather than the processor built-in emulation, see the manual.

You may want to check out GDL, the open source IDL clone, if you don't need widgets on that server.

Other things to check is how your graphics get to your screen - are you running locally? Or are you running an X client over the network? This can be really slow, especially if the network is in heavy use or has configuration errors (half/full-duplex mismatch and the like). Try VNC as an alternative to remote X.

Hope this helps

Jo

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Subject: Re: what IDL version should be installed on a 64-bit redhat linux, SGI (MIPS) machine ?

Posted by [Weihua FANG](#) on Mon, 26 Jun 2006 13:15:23 GMT

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Hi, Jo,

SGI Prepack 3. was installed in my SGI machine.

Unfortunately, most of my IDL applications have fancy widget/graphic objects for 3d visualization... Maybe I shall ask RSI for Linux\_MIPS IDL. :P

Thank you for your info on GDL. I will have a try and hope GDL can save my code.

Weihua

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Subject: Re: what IDL version should be installed on a 64-bit redhat linux, SGI (MIPS) machine ?

Posted by [rtowler](#) on Mon, 26 Jun 2006 16:28:38 GMT

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Weihua FANG wrote:

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> objects for 3d visualization... Maybe I shall ask RSI for Linux\_MIPS  
> IDL. :P

Do yourself a favor and buy a cheap x86 desktop with a midrange or high-end "gaming" video card to use as your visualization box. If you are running an Altix they really aren't geared for this sort of thing. The cost of the extra IDL license will be worth it.

Windows will offer the best performance and driver support. If you are going to run linux then nVidia is your only real choice as ATI's linux support has been lacking.

> Thank you for your info on GDL. I will have a try and hope GDL can save  
> my code.

I don't follow the development closely but I don't think GDL has any  
object graphics functionality.

-Rick

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Subject: Re: what IDL version should be installed on a 64-bit redhat linux, SGI  
(MIPS) machine ?

Posted by [JD Smith](#) on Mon, 26 Jun 2006 16:41:54 GMT

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On Mon, 26 Jun 2006 09:28:38 -0700, rtowler wrote:

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> Weihua FANG wrote:  
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I presume you mean for OpenGL stuff? For memory intensive operations, IDL  
Linux often has the edge (better memory allocator). For smaller  
problems which easily fit in memory, back when I compared time\_test3 on  
Linux/Windows on the same box, they split the difference in terms of  
tests, with some favoring Windows, some Linux (though I think the overall  
average favored Windows, with it's better than GCC compilers).

JD

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Subject: Re: what IDL version should be installed on a 64-bit redhat linux, SGI  
(MIPS) machine ?

Posted by [rtowler](#) on Mon, 26 Jun 2006 17:39:10 GMT

JD Smith wrote:

> On Mon, 26 Jun 2006 09:28:38 -0700, rtowler wrote:

>

>>

>> Weihua FANG wrote:

>>

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> Linux/Windows on the same box, they split the difference in terms of

> tests, with some favoring Windows, some Linux (though I think the overall

> average favored Windows, with it's better than GCC compilers).

Of course :) Windows will offer the best OpenGL performance and driver support. I know the OG performance gap is narrowing (at least it has been, I haven't tested IDL OG on linux in a year or so) but linux driver support from the graphics vendors still seems to be bit of an afterthought.

-Rick

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