Subject: Re: Performance improvement on IDL 6.2 for Linux/MacOSX? Posted by Reno on Fri, 25 Nov 2005 11:03:24 GMT

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I had the same curiosity on the performance in OSX. In my case, Powerbook with 4800rpm HDD & 867MHz CPU would be the main cause, but Linux folks have been quite happy with its performance. As far as I know, v.6.2 still doesn't have Altivec optimisation (should've shown in What's New, otherwise), and RSI wasn't likely to change Unix source code of IDL further unless with more users hence more demand. Remember that colour coding in IDLDE is still far away from their priority. Shame.

As it's been just a couple of days with IDL6.2 in OSX, I am entirely happy with the new version is much improved windows-version-like 'help'. It IS faster than sluggish PDF files. But it seems that Help in the new Windows version became slower, probably blamed on Java.

DrRC

Subject: Re: Performance improvement on IDL 6.2 for Linux/MacOSX? Posted by alban on Fri, 25 Nov 2005 13:22:18 GMT

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Yes, you're right.

Actually, the performance of IDL in Linux is quite good, but still I was surprised to find the same code running a little bit slower than on the same Win computer. You can imagine what my shock was when I tested the same code on the G4! Probably same as yours...

I understand you have now a 6.2 version and it is still slow on OS X because of the lack of decent AltiVec support.

Anyway, IDL is stable and works just fine in both Linux and OSX -surely because of the Unix underneath-; I still cannot understand that the Mac OSX version of IDL is so much slower than the Wintel. OK, I can in terms of market demand, but still we are talking about a commercial product highly priced.

I guess Mac IDL users just must look forward to getting Intel chips soon.

Many thanks and best regards.

Marc

Subject: Re: Performance improvement on IDL 6.2 for Linux/MacOSX?

Posted by Mark Hadfield on Sun, 27 Nov 2005 21:30:37 GMT

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alban wrote:

- > [snip]
- > Actually, the performance of IDL in Linux is quite good, but still I
- > was surprised to find the same code running a little bit slower than on
- > the same Win computer
- > [snip]

Why did that surprise you?

--

Mark Hadfield "Kei puwaha te tai nei, Hoea tahi tatou" m.hadfield@niwa.co.nz
National Institute for Water and Atmospheric Research (NIWA)

Subject: Re: Performance improvement on IDL 6.2 for Linux/MacOSX? Posted by alban on Mon, 28 Nov 2005 08:52:12 GMT

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Hi, Mark,

I do not know, probably just some prejudices. Anyway, the Wintel computer was the same one as the Linux one -differently booted-; I guess I had expected the same performance on the same hardware, independently of the OS.

My "problem" is that I run heavy code on IDL and I need to keep on working after that; that makes the use of IDL on Windows platforms impossible. I guess that was the cause of my initial disappointment. Regards.

Marc

Mark Hadfield wrote:

- > alban wrote:
- >> [snip]
- >> Actually, the performance of IDL in Linux is guite good, but still I
- >> was surprised to find the same code running a little bit slower than on
- >> the same Win computer
- >> [snip]

>

- > Why did that surprise you?
- >
- > --
- > Mark Hadfield "Kei puwaha te tai nei, Hoea tahi tatou"
- > m.hadfield@niwa.co.nz

Subject: Re: Performance improvement on IDL 6.2 for Linux/MacOSX? Posted by Mark Hadfield on Mon, 28 Nov 2005 23:51:46 GMT

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alban wrote:

> Hi, Mark,

>

- > I do not know, probably just some prejudices. Anyway, the Wintel
- > computer was the same one as the Linux one -differently booted-; I
- > guess I had expected the same performance on the same hardware,
- > independently of the OS.

Oh right, I thought you were expecting poorer performance on Windows.

As one of the gurus pointed out earlier in this thread (too lazy to look it up) the OS itself has very little effect on IDL performance. The important variables are compiler (Windows IDL has a slight advantage here) and the graphics subsystem (the comparison is mixed).

- > My "problem" is that I run heavy code on IDL and I need to keep on
- > working after that; that makes the use of IDL on Windows platforms
- > impossible.

Why's that? Memory fragmentation (which I'll accept)? Or inability to run IDL at low priority (which I won't)?

--

Mark Hadfield "Kei puwaha te tai nei, Hoea tahi tatou" m.hadfield@niwa.co.nz
National Institute for Water and Atmospheric Research (NIWA)

Subject: Re: Performance improvement on IDL 6.2 for Linux/MacOSX? Posted by alban on Thu, 01 Dec 2005 15:57:44 GMT

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I think the key point in IDL performance is the processor. Some colleagues of mine told me IDL did not work very well -not as well as expected- on a brand new 6000\$ Solaris 64-bit platform two years ago. In my Mac G4 1.2 GHz it is incredibly slow -just a little bit faster than an old P3 1GHz- and that has little to do with compiler or graphics system. It is definitely the processor.

Probably IDL is optimised for x86 architectures alone, which is, considered the price of one licence, a deeply admirable strategy; the differences between linux/win performance can easily be explained by the use of different compilers...

Concerning your question, I do not have many experience working with Windows and IDL. I had used Matlab on Windows before, and the multitasking capabilities of the system were far below those of Unix platforms. Some people have told me this has been improved with XP; anyway, I performed a test yesterday on a Windows XP computer (P4, 2.4) GHz, 1 GB RAM) using the same code that I usually run on my Linux (same computer) and MacOS (G4, 1.2GHz, 1.25 GB RAM) computers. I ran the program -image processor- three times simultaneously taking care of switching the priorities to low for the three processes. The equivalent in Mac OS or in Linux is to renice them. Both Linux and Mac OS worked much better than Windows.

Do not take me wrong, I do think that IDL on Windows works fine -better as I had expected, it is true-, but the system is not as stable as others. When performing numerical simulation, or heavy computational tasks, the main advantage of a system is its stability. I think that IDL is a language mainly developed for numerical simulations, and so I am sure there are more suitable machines for that than the Windows ones. I find it very "funny" that IDL works best on platforms which are less suitable for its main purpose -although the most spread ones, it is true-.

Regards.

Marc

- > Mark Hadfield wrote:
- > alban wrote:
- >> Hi, Mark,
- >>
- >> I do not know, probably just some prejudices. Anyway, the Wintel
- >> computer was the same one as the Linux one -differently booted-; I
- >> guess I had expected the same performance on the same hardware,
- >> independently of the OS.
- >

>

- > Oh right, I thought you were expecting poorer performance on Windows.
- > As one of the gurus pointed out earlier in this thread (too lazy to look
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- >> My "problem" is that I run heavy code on IDL and I need to keep on

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> Mark Hadfield "Kei puwaha te tai nei, Hoea tahi tatou" > m.hadfield@niwa.co.nz
> National Institute for Water and Atmospheric Research (NIWA)
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