Subject: Best,Fastest platform for IDL 5.2 (NT or UNIX)
Posted by Richard Tyc on Mon, 13 Sep 1999 07:00:00 GMT
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IDL users,

To add to the another similar post, I would like to know from the
experts what system they would buy if they had $10K - $30K (speed being
an important factor) ?

We are running on a SGI O2 R5K, 576Mb RAM and it is pathetically
slow!! Our project has recently received some infusion of capital and I
would like to ask what hardware platform would be ideal ? I am not
opposed to switching over to NT.

The application makes heavy use of object graphics, volume rendering
with cutting planes etc. (eg. render volumes of 512x512x100 with
real-time motion updates using the trackball object)

I was thinking of moving up to a SGI Octane with the R12K CPU (or
multiple CPU).
Any performance comparisons with IDL on the new Pentium III 600 MHz
machines vs. UNIX workstations ?

Any benefit in moving into a multi-CPU system (NT or IRIX) for IDL ?
does it even make use of multi-processor for rendering etc. ?

Thanks

Rich

File Attachments
1) richt.vcf, downloaded 140 times

Subject: Re: Best,Fastest platform for IDL 5.2 (NT or UNIX)
Posted by Olivier ARCHER on Tue, 14 Sep 1999 07:00:00 GMT
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I recently switch from solaris platform (Ultra 60, 1Go RAM, monoproc at
360Mhz with 2Mo cache) to intel/linux (768Mo Ram, Xeon 550Mhz with
512Ko cache).
I ran a program on the 2 platform, and it was running 2 times faster on
intel/linux. The program have big matrices (less than 512Mo), and it
make just few graphical output. Perhaps it is not a judicious test. But
intel/linux is less expensive than sun...

--
Olivier

Subject: Re: Best,Fastest platform for IDL 5.2 (NT or UNIX)
Posted by Patrick V. Ford on Wed, 15 Sep 1999 07:00:00 GMT
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In article <37DD70F9.D76719BB@sbrc.umanitoba.ca>, Richard Tyc
<richt@sbrc.umanitoba.ca> wrote:

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>
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> Any benefit in moving into a multi-CPU system (NT or IRIX) for IDL ?
> does it even make use of multi-processor for rendering etc. ?
>
> Thanks
>
>
> Rich
If you must have UNIX or NT and can wait several months, then you
should look at
MacOS X. It has a BSD kernal (Mach 3?) and, if you wish, the Mac
look-and-feel can
be stripped off and replace with a CLI or X-windows. Comments re:
Linux-PPC and
MacOS X
http://macos-x.com/

The G4 PPC with AltiVec accelerates certain numerically intensive process by up to
5x. It is claimed at the current clock speeds to perform 1Gflop with burst of 4Gflops.
IDL currently supports AltiVec.
http://www.mot.com/SPS/PowerPC/AltiVec/
http://www.rsinc.com/pressrelease/pr_083199.cfm

Clock speed for clock speed, the G4 is significantly faster than the PIII, but currently it
is not running at 700Mhz to 1 GHz either.

In terms of multiprocessors systems the current offerings on the Mac are weak, but as
far as clusters or parallel processing, it is far stronger than reported in most media.

http://www.macintouch.com/cluster.html

Since IBM released its mother-board specs for the PPC, rumor has it that several
companies are going to make UNIX- based versions.

I hope this helps.

As an aside, does IDL support Linux-PPC and OpenGL? It seems to me that support
for graphics card like 3DFx would improve performance across multiple platforms.

Regards

Patrick Ford
Baylor College of Medicine
Pford@bcm.tmc.edu

Subject: Re: Best,Fastest platform for IDL 5.2 (NT or UNIX)
Posted by Patrick Ford on Fri, 17 Sep 1999 07:00:00 GMT
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wmc@bas.ac.uk wrote:

> Richard Tyc <richt@sbrc.umanitoba.ca> wrote:
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> set of speed tests in IDL for a variety of platforms and published the
> results on the web. Someone else will surely know the real reference or
> perhaps dejanews will tell you.
>
> I particularly liked the survey because our alpha-600 won in the cpu section ;-)
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> However, in terms of performance/price, I recall that pentium-type objects
> came out on top.
>
> -W.
>
> [just looked it up: see ftp://iras2.tn.cornell.edu/pub/jdsmith/ for the results,
> or search deja for "Speed Survey". It was in apr 1998 - perhaps time for a
> re-run?]
>
> --
> William M Connolley | wmc@bas.ac.uk | http://www.nbs.ac.uk/public/icd/wmc/
> Climate Modeller, British Antarctic Survey | Disclaimer: I speak for myself

As I recall the test, my Mac was near the top in CPU performance and it   really
sucked in the video display. I don't believe with the newer mother boards that
this is this case now. I would really like to see an update because I don't
believe the last statement is true.

Patrick Ford
Baylor College of Medicine
pford@bcm.tcm.edu

Subject: Re: Best,Fastest platform for IDL 5.2 (NT or UNIX)
Posted by Michael Werger on Fri, 17 Sep 1999 07:00:00 GMT
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Hy,
If you think moving from SGI to a reasonable(!) Intel machine,
only some HP workstations are comparable - even in price).
Personally, I would stay with the UNIX machine: using the command
line or the GUI when you like it (with 95/98 not possible - NT
also not, probably?). Then you have also to keep in mind the
different memory handling in the the UNIX/LINUX/Windows world.
However, I'm happy with a ASUS P2B-S with Intel BX, PII-400MHz
and 128Mb RAM and a big IBM HD. And for you money you can build
a farm of these kind of cheap computers then ;-)
I doubt that IDL makes use of the special PIII commands, so you
get only the speed factor of the CPU more performance.

(Note: I do not speak for HP or any other company or institution here)
--
Michael Werger   -----------o
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            Astrophysics Division   mwerger@astro.estec.esa.nl|
| Postbus 299   http://astro.estec.esa.nl |
| 2200 AG Noordwijk   +31 71 565 3783 (Voice)
o------------------- The Netherlands   +31 71 565 4690 (FAX)

Subject: Re: Best,Fastest platform for IDL 5.2 (NT or UNIX)
Posted by wmc on Fri, 17 Sep 1999 07:00:00 GMT
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Richard Tyc <richt@sbrc.umanitoba.ca> wrote:
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---

Subject: Re: Best,Fastest platform for IDL 5.2 (NT or UNIX)
Posted by Richard Tyc on Tue, 21 Sep 1999 07:00:00 GMT
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Anyone out there using IDL 5.2 with the new SGI Visual Workstations (540)
for NT.

They can be fitted with up to 4 Pentium III Xeon 550 MHz processors.
These things look impressive on paper but I am really curious about the
performance of their IVC graphics architecture which has a much higher
bandwidth than AGP (up to 3.2 Gb/sec compared to 528 Mb/sec (peak) for AGP).
I'd like to see this machine against something like a Dell Presicion 610,
dual PIII 550MHz with a high end graphics card (like a Intense 3D Wildcat
4000)

Anyone know of any benchmark tests ?

Rich

Subject: Re: Best,Fastest platform for IDL 5.2 (NT or UNIX)
Posted by edors on Tue, 21 Sep 1999 07:00:00 GMT
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Hello,

I had the website with the results from this survey bookmarked, look
here:

http://astrosun.tn.cornell.edu/staff/jdsmith/IDLSPEC.html

  Eric

>>>> > "Patrick" == Patrick Ford <pford@texas.net> writes:

  Patrick> wmc@bas.ac.uk wrote:

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Patrick> Patrick Ford Baylor College of Medicine pford@bcm.tcm.edu

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| Eric E. Dors |
| Los Alamos National Laboratory |
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