Subject: Re: Best,Fastest platform for IDL 5.2 (NT or UNIX)
Posted by htonishi on Mon, 13 Sep 1999 07:00:00 GMT
View Forum Message <> Reply to Message

This is not quite the comparison you wanted but perhaps
adds some insight. I run IDL 5.2.1 on a 400 Mhz PII with
256 Mb and NT4 SP5, IDL 5.2.1 on an old SGI XZ with an
R4400 at 140 Mhz (???), and IDL 5.1 on a 195Mhz O2 R10000.
The only comparison that I have is for a monte carlo signal
processing program that uses double precision and does NOT
use a lot of memory. Surprisingly the two SGIs perform
almost identically. I think this is because 5.1 is not
built to use the higher performance floating point
libraries. The PII runs at least 2x as fast as the SGIs.

If you can wait a few months I would suggest a dual PIII at
possibly 700 Mhz with the new 133 Mhz chipset from Intel
and either NT or linux. I don't know if the dual PIII will
get you more performance (I doubt it) but it will certainly
help if you want to run your IDL program simultaneously
with something else.

Subject: Re: Best,Fastest platform for IDL 5.2 (NT or UNIX)
Posted by davidf on Tue, 14 Sep 1999 07:00:00 GMT
View Forum Message <> Reply to Message

Richard Tyc (richt@sbrc.umanitoba.ca) writes:

> 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. ?

I'm told that because of the lack of support in OpenGL for
volume rendering that all object volume rendering in IDL
is done in software. And this software has been written
so that it can take advantage of up to 8 processors.
The key is to use the HINTS keyword on the volume
object to select multi-processor support.

I've no suggestion for machines for you. But I'll tell
you what, I'm awfully sorry I sold that Apple stock last
year. :-(

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Best,Fastest platform for IDL 5.2 (NT or UNIX)
Posted by rivers on Tue, 14 Sep 1999 07:00:00 GMT
View Forum Message <> Reply to Message

In article <37DD70F9.D76719BB@sbrc.umanitoba.ca>, Richard Tyc
<richt@sbrc.umanitoba.ca> writes:

> 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 ?

I am using a Dell Precision 610 workstation with 1GB of RAM, 36 GB of RAID 0 disk, and dual 450 MHz processors. I am very pleased with the system. Its cost today (with 550 MHz processors) is about $8,000.

My application is 3-D tomography data processing and visualization. Having 2 processors helps in 2 ways:

- I can be running one IDL session doing compute-intensive reconstructions on one processor while doing interactive work on the other.

- The IDL volume rendering object does use both processors

1 GB of RAM is essential for what I am doing, in fact I still need more memory

at times, but Windows has a limit of 1 GB of virtual memory per process. The memory fragmentation problems often seen in IDL under Unix are much less serious under Windows. I can create and delete 300MB arrays interactively for hours without having to restart IDL.

I have not used similarly configured Unix systems so I really can't compare.

Mark Rivers
