Subject: Re: IDL on Dual processor Linux SMP box?
Posted by J.D. Smith on Wed, 03 Jun 1998 07:00:00 GMT
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John Krist wrote:

>
> Greetings:
>
>   I have been considering getting a dual processor Pentium II workstation
> on which I would run Linux in SMP mode, mostly to use IDL. Does anyone
> have any experience with such a configuration? I recall somewhere that
> an IDL license on a x86 Linux box is tied to the Ethernet card address,
> rather than the processor serial number (which perhaps Intel processors do
> not report). If so, I could run IDL on both processors at the same time
> under the same license, correct?
>
>   The system I may get is a Dell Precision Workstation 410 with dual
> 400 MHz processors, with the SCSI and video cards replaced with Buslogic
> SCSI and Matrox Millenium II video cards for better Linux compatibility
> (I can only get boxes from big-name companies, not from small-name Linux
> specialists).
>
> Thanks,
> John Krist
> krist@stsci.edu
>

It's not clear to me how some parts of the licensing works, but I can certainly run
two cuncurrent IDL's as a single user on my 1-license, 1-processor, Linux machine.
Here is an excerpt of one of my postings concering the IDL speed survey, IDLSPEC, on
a dual-processor linux machine, in which just this scenario is described:

> The multi-processor machines suffered, since IDL is not multi-threaded
> on any architecture I know of. However, Joe Harrington, a local Linux
> guru and builder of multi-processor Pentium boxes, did demonstrate the
> superior capability of his dual Pentium-II machine to me by running
> concurrently two sessions of IDL each running time_test2. As he
> expected, both sets of tests ran in parallel about 1.75 times as fast as
> when run one at a time. However, since this is not a normal mode of
> operating IDL, I entered only his single-session results.

It's not clear to me how one would use two separate IDL processes effectively, but
keep in mind that other processes (X server, etc.) would be split across both
processors. The additional-performance-to-cost ratio for single IDL processes may
not be compelling, though. There are several old posts in the archives discussing
this subject.

JD

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