## Subject: IDL Matrix Multiply and Dual-Core CPUs Posted by s.haenger on Fri, 09 May 2008 14:27:39 GMT

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Hi,

I have a Problem with IDL 7.0

We have to multiply large matrices. With some matrix sizes, the CPU usage is 100% but for most of the matrices it is 50%. (I'm runnning it on a Intel T7250 (Dual Core, 2GHz, 2MB L2 Cache))

The CPU System Variable is configured like this:

Now we do this:

matA = randomn(42, 2000, 2200) matB = randomn(43, 2020, 2000)

matIdI = matA##matB

So now i've got a CPU usage of 100%

but with this:

matA = randomn(42, 2500, 2500) matB = randomn(43, 2520, 2500)

matIdl = matA##matB

the cpu usage is around 50%-60%

I've already tried to increase the TPOOL\_NTHREADS and to decrease the TPOOL\_MIN\_ELTS! It didn't help!

We throught it could be because the size (2500\*2520=) produces an overflow and the matrix size gets too small or negative, so IDL uses just 1 thread to compute.

Does anybody know how I can fix that problem?

Thanks a lot Samuel