Package: RhpcBLASctl (via r-universe)

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Title Control the Number of Threads on 'BLAS'

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Description Control the number of threads on 'BLAS' (Aka 'GotoBLAS', 'OpenBLAS', 'ACML', 'BLIS' and 'MKL'). And possible to control the number of threads in 'OpenMP'. Get a number of logical cores and physical cores if feasible.

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URL https://prs.ism.ac.jp/~nakama/Rhpc/

ByteCompile true

NeedsCompilation yes

Repository https://cran.r-universe.dev

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RhpcBLASctl-package *Control the number of threads on BLAS*

Description

Control the number of threads on 'BLAS' (Aka 'GotoBLAS', 'ACML' and 'MKL').

If you build R directly on Windows and the BLAS file name is not 'Rblas.dll', you can give it as 'options ("RhpcBLASctl.win.Rblas.name" = "boofoo.dll")'.

openmp-related functions only work at build-time instructions. Omp_get * now returns NA_Integer if R was not built with openmp instructions. NOTE: if R itself is built without OpenMP instructions and BLAS thread is used with OpenMP, this package will not work...XD

Usage

```
get_num_cores()
get_num_procs()
blas_get_num_procs()
blas_set_num_threads(threads)
omp_get_num_procs()
omp_get_max_threads()
omp_set_num_threads(threads)
```

Arguments

threads	Number of threads

Details

https://prs.ism.ac.jp/~nakama/Rhpc/

Value

get_num_cores	Number of CPU physical processor. NOTE:Returns 1L if unknown
get_num_procs	Number of CPU logical processor. NOTE:Returns 1L if unknown
blas_get_num_procs	Number of available cores for the optimized BLAS. NOTE:Returns 1L if unknown
omp_get_num_procs	Result from OpenMP's omp_get_num_procs function. NOTE Returns NA_integer_ if unknown
omp_get_max_threads	Result from OpenMP's omp_get_max_threads function. NOTE Returns NA_integer_ if unknown

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Examples

```
get_num_cores()
get_num_procs()
blas_get_num_procs()
blas_set_num_threads(2)
omp_get_num_procs()
omp_get_max_threads()
omp_set_num_threads(2)
```

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