

ROMP – an OpenMP binding for R

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A binding of the parallel application programming interface OpenMP for the R-Interpreter is presented. Fortran code is generated and compiled on the fly by the toolkit and the OpenMP directives are inserted. The toolkit consists of a family of special apply routines together with reduction routines like `sum`, `mean`, `product` which generate parallel OpenMP code. The toolkit can be used for easy parallelization of parts of an R program without a steep learning curve for the user. Examples are presented which implement a systolic loop in RMPI and in the ROMP-toolkit.