Package ‘doParallel’

February 15, 2013

Type Package

Title Foreach parallel adaptor for the parallel package

Version 1.0.1

Author Revolution Analytics

Maintainer Revolution Analytics <packages@revolutionanalytics.com>

Description Provides a parallel backend for the %dopar% function using the parallel package.

Depends R (>= 2.14.0), foreach(>= 1.2.0), iterators(>= 1.0.0), utils,parallel

Enhances compiler, RUnit

License GPL-2

Repository CRAN

Repository/R-Forge/Project doparallel

Repository/R-Forge/Revision 4

Date/Publication 2012-04-16 06:09:51

NeedsCompilation no

R topics documented:

   doParallel-package .................................................. 2
   registerDoParallel ................................................. 2

Index 4
The doParallel package provides a parallel backend for the foreach/%dopar% function using the parallel package of R 2.14.0 and later.

Further information is available in the following help topics:

registerDoParallel register doParallel to be used by foreach/%dopar%

To see a tutorial introduction to the doParallel package, use vignette("gettingstartedParallel").
To see a tutorial introduction to the foreach package, use vignette("foreach").
To see a demo of doParallel computing the sinc function, use demo(sincParallel).
Some examples (in addition to those in the help pages) are included in the “examples” directory of the doParallel package. To list the files in the examples directory, use list.files(system.file("examples", package="doParallel")).
To run the bootstrap example, use source(system.file("examples", "bootParallel.R", package="doParallel")).
This is a simple benchmark, executing both sequentially and in parallel. There are many more examples that come with the foreach package, which will work with the doParallel package if it is registered as the parallel backend.
For a complete list of functions with individual help pages, use library(help="doParallel").
cores

The number of cores to use for parallel execution. If not specified, the number of cores is set to the value of options("cores"), if specified, or to one-half the number of cores detected by the parallel package.

... Package options. Currently, only the nocompile option is supported. If nocompile is set to TRUE, compiler support is disabled.

Details

The parallel package from R 2.14.0 and later provides functions for parallel execution of R code on machines with multiple cores or processors or multiple computers. It is essentially a blend of the snow and multicore packages. By default, the doParallel package uses snow-like functionality on Windows systems and multicore-like functionality on Unix-like systems. The snow-like functionality should work fine on Unix-like systems, but the multicore-like functionality is limited to a single sequential worker on Windows systems. On workstations with multiple cores running Unix-like operating systems, the system fork call is used to spawn copies of the current process.
Index

∗Topic package
   doParallel-package, 2
∗Topic utilities
   registerDoParallel, 2

doParallel (doParallel-package), 2
doParallel-package, 2

registerDoParallel, 2