

Package ‘doMC’

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Type Package

Title Foreach Parallel Adaptor for 'parallel'

Version 1.3.6

Description Provides a parallel backend for the `%dopar%` function using the multicore functionality of the parallel package.

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

Imports utils

Enhances compiler, RUnit

License GPL-2

NeedsCompilation no

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doMC-package *The doMC Package*

Description

The doMC package provides a parallel backend for the `foreach/%dopar%` function using the multi-core functionality of the parallel package.

Details

Further information is available in the following help topics:

`registerDoMC` `register doMC to be used by foreach/%dopar%`

To see a tutorial introduction to the doMC package, use `vignette("gettingstartedMC")`.

To see a tutorial introduction to the foreach package, use `vignette("foreach")`.

To see a demo of doMC computing the sinc function, use `demo(sincMC)`.

Some examples (in addition to those in the help pages) are included in the “examples” directory of the doMC package. To list the files in the examples directory, use `list.files(system.file("examples", package="doMC"))`.

To run the bootstrap example, use `source(system.file("examples", "bootMC.R", package="doMC"))`.

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 doMC package if it is registered as the parallel backend.

For a complete list of functions with individual help pages, use `library(help="doMC")`.

`registerDoMC` *registerDoMC*

Description

The `registerDoMC` function is used to register the multicore parallel backend with the `foreach` package.

Usage

```
registerDoMC(cores=NULL, ...)
```

Arguments

<code>cores</code>	The number of cores to use for parallel execution. If not specified, the number of cores is set to the value of <code>options("cores")</code> , if specified, or to approximately half the number of cores detected by the <code>parallel</code> package.
<code>...</code>	Package options. Currently, only the <code>nocompile</code> option is supported. If <code>nocompile</code> is set to <code>TRUE</code> , compiler support is disabled.

Details

The `multicore` functionality, originally written by Simon Urbanek and subsumed in the `parallel` package in R 2.14.0, provides functions for parallel execution of R code on machines with multiple cores or processors, using the system `fork` call to spawn copies of the current process. The `multicore` functionality, and therefore `registerDoMC`, should not be used in a GUI environment, because multiple processes then share the same GUI.