Package ‘benchmarkmeData’

November 2, 2019

Type Package
Title Data Set for the 'benchmarkme' Package
Version 1.0.3
Maintainer Colin Gillespie <csgillespie@gmail.com>
Description Crowd sourced benchmarks from running the 'benchmarkme' package.
License GPL-2 | GPL-3
URL https://github.com/csgillespie/benchmarkme-data
BugReports https://github.com/csgillespie/benchmarkme-data/issues
Depends R (>= 3.5.0)
Imports dplyr, graphics, tibble, utils
Suggests benchmarkme, covr, DT, testthat
Encoding UTF-8
LazyData TRUE
RoxygenNote 6.1.1
NeedsCompilation no
Author Colin Gillespie [aut, cre] (<https://orcid.org/0000-0003-1787-0275>)
Repository CRAN
Date/Publication 2019-11-02 18:00:02 UTC

R topics documented:

  benchmarkmeData-package ............................................. 2
  get_datatable_past ................................................. 2
  is_blas_optimize .................................................... 3
  make_data_set ....................................................... 3
  past_results ........................................................ 4
  past_results_v2 ..................................................... 4
  plot_past ........................................................... 4
  summarise_results ................................................... 5
The benchmarkmeData package

Description

This package contains the results from users running the benchmarkme package. The key function is plot_past().

Author(s)

<csgillespie@gmail.com>

See Also

https://github.com/csgillespie/benchmarkme-data

Examples

plot_past("prog")

get_datatable_past Interactive table of results

Description

A summary of past results

Usage

get_datatable_past(test_group, blas_optimize = NULL, cores = 0)

Arguments

test_group One of "prog", "matrix_fun", "matrix_cal", "read5", "read50", "read200", "write5", "write50" or "write200". Default value prog.

blas_optimize Default NULL. The default behaviour is to plot all results. To plot only the BLAS optimized results, set to TRUE, otherwise FALSE.

cores Default 0, i.e. no parallel.

Examples

## Need the DT package
## View all results for prog test
get_datatable_past("prog")
**is_blas_optimize**

**Description**

Try to determine parallel BLAS, which implies non-standard R! Compare user with elapsed time.
If user » elapsed, then parallel BLAS

**Usage**

```r
is_blas_optimize(results)
```

**Arguments**

- `results` The output from a benchmark_* call.

**make_data_set**

**Functions for manipulating uploaded results**

**Description**

Functions used for moving and creating the past_results_v2 data set from uploaded data. The move_files function is used to moved files from the server to another location, whilst removing any empty data sets.

**Usage**

```r
make_data_set(from)
move_files(from, to)
```

**Arguments**

- `from` A directory containing the uploaded results.
- `to` Destination directory

**Note**

One of the unit tests uploads an empty results file. Files where the results are NULL are moved to a sub-directory (called) empty in the to directory. If the empty directory doesn’t exist, it is created. Currently these functions are specific to my set-up.
**Description**

A summary of past benchmarks.

**Format**

A data frame

---

**plot_past**

**Description**

Plot the previous benchmarks. This function creates two figures.

- Figure 1: Total benchmark time over all benchmarks (in seconds) on the y-axis.
- Figure 2: Relative time (compared to the smallest benchmark).

The data set used is `data(past_results_v2)`.

**Usage**

```r
plot_past(test_group, blas_optimize = NULL, cores = 0, log = "y")
```

**Arguments**

- **test_group**
  - One of "prog", "matrix_fun", "matrix_cal", "read5", "read50", "read200", "write5", "write50" or "write200". Default value `prog`.
- **blas_optimize**
  - Default `NULL`. The default behaviour is to plot all results. To plot only the BLAS optimized results, set to `TRUE`, otherwise `FALSE`.
- **cores**
  - Default 0, i.e. no parallel.
- **log**
  - By default the y axis is plotted on the log scale. To change, set the the argument equal to the empty parameter string, "".
summarise_results

Examples

```r
## Plot all past results for the 'prog' benchmark
plot_past("prog", blas_optimize = NULL)
```

---

### Selecting results

Selects and aggregates over the past_results_v2 data set or the results input data set.

**Usage**

```r
summarise_results(res)
selct_results(test_group, results = NULL, blas_optimize = NULL, cores = 0)
```

**Arguments**

- `res`: A list containing benchmark results and system information.
- `test_group`: One of "prog", "matrix_fun", "matrix_cal", "read5", "read50", "read200", "write5", "write50" or "write200". Default value `prog`.
- `results`: Default `NULL`. If `NULL` the `past_results_v2` data set is used. Otherwise, the input data set.
- `blas_optimize`: Default `NULL`. The default behaviour is to plot all results. To plot only the BLAS optimized results, set to `TRUE`, otherwise `FALSE`.
- `cores`: Default 0, i.e. no parallel.

**Value**

A data frame

**Examples**

```r
select_results("prog", blas_optimize = NULL)
```
Index

*Topic package
  benchmarkmeData-package, 2

benchmarkmeData
  (benchmarkmeData-package), 2
benchmarkmeData-package, 2

get_datatable_past, 2

is_blas_optimize, 3

make_data_set, 3
move_files (make_data_set), 3

past_results, 4
past_results_v2, 4
plot_past, 4

select_results (summarise_results), 5
summarise_results, 5