NAME

CUTEST_timings_threaded − CUTEst tool to find the CPU time used by a CUTEst evaluation subrotine.

SYNOPSIS

CALL CUTEST_timings_threaded(status, name, time, thread)

For real rather than double precision arguments, instead

CALL CUTEST_timings_threaded_s(...)

DESCRIPTION

The CUTEST_timings_threaded subroutine obtains the CPU time used by an individual CUTEst evaluation subroutine.

ARGUMENTS

The arguments of CUTEST_timings_threaded are as follows

status [out] - integer
the outputr status: 0 for a succesful call, 26 for a call to an unknown evaluation routine,

name [in] - character variable of variable length that either contains
the name of a CUTEst subroutine, or one of the words 'start' or 'stop'. Supported values are:

'start' starts to record timings for the CUTEst evaluation tools -
recordings are initially turned off

'stop' pauses the recording until another 'start' occurs

name is the name of a CUTEst evaluation tool,
where name is one of strings
'cutest_ccfg', 'cutest_ccfsg', 'cutest_cch',
'cutest_cchprods', 'cutest_ccifg', 'cutest_ccifsg',
'cutest_cdh', 'cutest_cdhc', 'cutest_cdimchp',
'cutest_ceh', 'cutest_cfn', 'cutest_cgr',
'cutest_cgrdh', 'cutest_chcprod', 'cutest_chprod',
'cutest_cidh', 'cutest_cish', 'cutest_cjprod',
'cutest_clfg', 'cutest_cofg', 'cutest_cofsg',
'cutest_csgr', 'cutest_csgreh', 'cutest_csgrsh',
'cutest_csh', 'cutest_cshc', 'cutest_cshcprod',
'cutest_cshp', 'cutest_cshprod', 'cutest_csjprod',
'cutest_ubandh', 'cutest_udh', 'cutest_ueh',
'cutest_ufn', 'cutest_ugr', 'cutest_ugrdh',
'cutest_ugreh', 'cutest_ugrsh', 'cutest_uhprod',
'cutest_uofg', 'cutest_ush', 'cutest_ushp' or
'cutest_ushprod',

time [out] - real that gives the recorded time for the named tool
(or 0.0 if name is 'start', 'stop' or an unrecognised tool).

thread [in] - integer
statistics are for the specified thread; threads are numbered from 1 to the value threads set when calling CUTEST_usetup_threaded or CUTEST_csetup_threaded.

AUTHORS

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SEE ALSO

CUTEst: a Constrained and Unconstrained Testing Environment with safe threads,
N.I.M. Gould, D. Orban and Ph.L. Toint,
Computational Optimization and Applications **60**:3, pp.545-557, 2014.

CUTEr (and SifDec): A Constrained and Unconstrained Testing Environment, revisited,
N.I.M. Gould, D. Orban and Ph.L. Toint,
ACM TOMS, **29**:4, pp.373-394, 2003.

CUTE: Constrained and Unconstrained Testing Environment,
I. Bongartz, A.R. Conn, N.I.M. Gould and Ph.L. Toint,
ACM TOMS, **21**:1, pp.123-160, 1995.

sifdecode(1), cutest(3M), cutest_ccfg_threaded(3M), cutest_ccfsg_threaded(3M), cutest_cch_threaded(3M), cutest_cchprods_threaded(3M), cutest_ccifg_threaded(3M), cutest_ccifsg_threaded(3M), cutest_cdh_threaded(3M), cutest_cdhc_threaded(3M), cutest_cdimchp_threaded(3M), cutest_ceh_threaded(3M), cutest_cfn_threaded(3M), cutest_cgr_threaded(3M), cutest_cgrdh_threaded(3M), cutest_chcprod_threaded(3M), cutest_chprod_threaded(3M), cutest_cifn_threaded(3M), cutest_cigr_threaded(3M), cutest_cisgr_threaded(3M), cutest_cidh_threaded(3M), cutest_cish_threaded(3M), cutest_cjprod_threaded(3M), cutest_clfg_threaded(3M), cutest_cofg_threaded(3M), cutest_cofsg_threaded(3M), cutest_csgr_threaded(3M), cutest_csgreh_threaded(3M), cutest_csgrsh_threaded(3M), cutest_csh_threaded(3M), cutest_cshc_threaded(3M), cutest_cshcprod_threaded(3M), cutest_cshp_threaded(3M), cutest_cshprod_threaded(3M), cutest_csjprod_threaded(3M), cutest_ubandh_threaded(3M), cutest_udh_threaded(3M), cutest_ueh_threaded(3M), cutest_ufn_threaded(3M), cutest_ugr_threaded(3M), cutest_ugrdh_threaded(3M), cutest_ugreh_threaded(3M), cutest_ugrsh_threaded(3M), cutest_uhprod_threaded(3M), cutest_uofg_threaded(3M), cutest_ush_threaded(3M), cutest_ushp_threaded(3M), cutest_ushprod_threaded(3M)