NAME

CUTEST_ureport − CUTEst tool to obtain statistics concerning function evaluation and CPU time used.

SYNOPSIS

CALL CUTEST_ureport(status, CALLS, TIME)

For real rather than double precision arguments, instead

CALL CUTEST_ureport_s(...)

DESCRIPTION

The CUTEST_ureport subroutine obtains statistics concerning function evaluation and CPU time used for unconstrained or bound-constrained optimization in a standardized format.

The problem under consideration is to minimize or maximize an objective function $f(x)$ over all $x \in R^n$ subject to the simple bounds $x^l \leq x \leq x^u$. The objective function is group-partially separable.

ARGUMENTS

The arguments of CUTEST_ureport are as follows

status [out] - integer
the outputr status: 0 for a succesful call, 1 for an array allocation/deallocation error, 2 for an array bound error, 3 for an evaluation error,

CALLS [out] - real array of length 4
gives the number of calls to the problem functions:

CALLS(1): number of calls to the objective function

CALLS(2): number of calls to the objective gradient

CALLS(3): number of calls to the objective Hessian

CALLS(4): number of Hessian times vector products

TIME [out] - real array of length 4:

TIME(1): CPU time (in seconds) for CUTEST_usetup

TIME(2): CPU time (in seconds) since the end of CUTEST_usetup

TIME(3): elapsed system clock time (in seconds) for CUTEST_usetup

TIME(4): elapsed system clock time (in seconds) since the end of CUTEST_usetup.

AUTHORS

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SEE ALSO

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Computational Optimization and Applications **60**:3, pp.545-557, 2014.

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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,
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