NAME

CREPRT – CUTEr tool to obtain statistics concerning function evaluation and CPU time used.

SYNOPSIS

CALL CREPRT(CALLS, TIME)

DESCRIPTION

The CREPRT subroutine obtains statistics concerning function evaluation and CPU time used for constrained optimization in a standardized format.

ARGUMENTS

The arguments of CREPRT are as follows

CALLS [out] - real array of length 7
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

CALLS(5): number of calls to the constraint functions

CALLS(6): number of calls to the constraint gradients

CALLS(7): number of calls to the constraint Hessians

TIME [out] - real array of length 2:

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

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

NOTE

Note that CALLS(4), CALLS(5) and CALLS(6) may account for codes which allow the evaluation of a selection of constraints only and may thus be much smaller than the number of constraints times the number of iterations.

AUTHORS

I. Bongartz, A.R. Conn, N.I.M. Gould, D. Orban and Ph.L. Toint

SEE ALSO

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, TOMS, **21**:1, pp.123-160, 1995.