NAME

sifdecode − SIF-decoding script.

SYNOPSIS

sifdecode [−s] [−h] [−k] [−o *0|1*] [−l *secs*] [−f] [−b] [−a *1|2*] [−show] [−param *name=value*[,*name=value...*]] [−force] [−debug] *problem[.SIF]*

DESCRIPTION

sifdecode applies the SIF decoder to the problem *problem.SIF* to produce the OUTSDIF.d file and the problem-dependant Fortan subroutines. It can be conveniently called from the command line with the −h, −o, −show, −param and −debug options. Other options are useful when *sifdecode* is called by other interfaces which require the decoding of a SIF file, as for instance a CUTEr interface.

sifdecode Options

You can start sifdecode with the following options:

−s Run sifdecode in single-precision mode, if available. Double precision is the default.

−h Print a short help message.

−k Keep the generated executable after use. May be useful when solving a particular problem with the same solver with different parameters. Deleting the executable after use is the default.

−o *0|1*

Regulate the output level of *sifdecode.* Verbose mode is **-o** 1, silent mode is **-o** 0. Silent mode is the default.

−l *secs*

Set a limit of *secs* second on *VA15* runtime. Unlimited cputime is the default.

−f Use automatic differentiation in Forward mode

−b Use automatic differentiation in Backward mode

−a *1|2*

−a 1 uses the older HSL automatic differentiation package AD01 and −a 2 uses the newer HSL automatic differentiation package AD02. −a 2 is the default.

−show

displays possible parameter settings for problem[.SIF]. Other options are ignored.

−param

Cast problem[.SIF] against explicit parameter settings. Several parameter settings may be given as a comma-separated list following −param or using several −param flags. Use *sifdec -show problem* to view possible settings. If a setting is not allowed in the SIF file, no action is taken unless *−force* is present.

−force

Forces the setting of the parameters named using *−param* to the given values, even if those values are not predefined in the SIF file.

−debug

Links all the libraries, creates the executable and stop to allow debugging. This option automatically enables −k, and turns off all compiler options except −g.

problem

problem.SIF is the name of the file containing the SIF information on the problem to be solved.

ENVIRONMENT

SIFDEC

Parent directory for SifDec.

MYSIFDEC

Home directory of the installed SifDec distribution.

MASTSIF

A pointer to the directory containing the CUTEr/SifDec problems collection. If this variable is not set, the current directory is searched for *problem.SIF*. If it is set, the current directory is searched first, and if *problem.SIF* is not found there, $MASTSIF is searched.

AUTHORS

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SEE ALSO

CUTEr (and SifDec): A Constrained and Unconstrained Testing Environment, revisited,
N.I.M. Gould, D. Orban and Ph.L. Toint, 2002.

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.

cob(1), fil(1), gen(1), hrb(1), knit(1), lmb(1), mns(1), nps(1), osl(1), prx(1), sdcob(1), sdfil(1), sdgen(1), sdhrb(1), sdknit(1), sdlmb(1), sdmns(1), sdnps(1), sdosl(1), sdprx(1), sdsnp(1), sdten(1), sdunc(1), sdva15(1), sdve09(1), sdve12(1), sdve14(1), sdvf13(1), snp(1), ten(1), unc(1), va15(1), ve09(1), ve12(1), ve14(1), vf13(1).