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NAME

clisp - Common Lisp language interpreter and compiler

SYNOPSIS

 $\begin{array}{c} \textbf{clisp} \; [\; \textbf{-h} \;] \; [\; \textbf{-m} \; \textit{memsize} \;] \; [\; \textbf{-M} \; \textit{memfile} \;] \; [\; \textbf{-q} \;] \; [\; \textbf{-i} \; \textit{initfile} \; \dots \;] \; [\; \textbf{-c} \; [\; \textbf{-l} \;] \; \textit{lispfile} \; \dots \;] \; [\; \textbf{-x} \; \textit{expression} \;] \end{array}$

DESCRIPTION

Invokes the common lisp interpreter and compiler. Invoked without arguments, executes a read-eval-print loop, in which expressions are in turn read from standard input, evaluated by the lisp interpreter, and their results output to standard output. Invoked with $-\mathbf{c}$, the specified lisp files are compiled to a bytecode that can be executed more efficiently.

OPTIONS

-h Displays a help message on how to use clisp.

- \mathbf{m} memsize

Sets the amount of memory **clisp** tries to grab on startup. The amount may be given as nnnnnn (measured in bytes), $nnn\mathbf{K}$ or $nnn\mathbf{KB}$ (measured in kilobytes) or $n\mathbf{M}$ or $n\mathbf{MB}$ (measured in megabytes). Default is 2.5 megabytes. The argument is constrained between 100 KB and 16 MB. -- This version of *clisp* allocates memory dynamically. memsize is essentially ignored.

-M memfile

Specifies the initial memory image. This must be a memory dump produced by the save init mem function.

-q Quiet: clisp displays no banner at startup and no good-bye message when quitting.

-i initfile ...

Specifies initialization files to be *load*ed at startup. These should be lisp files (source or compiled).

-c $lispfile \dots$

Compiles the specified lispfiles to bytecode. The compiled files can then be *load*ed instead of the sources to gain efficiency.

-l A bytecode listing of the files being compiled will be produced. Useful only for debugging purposes.

$-\mathbf{x}$ expressions

Executes a series of arbitrary expressions instead of a read-eval-print loop. The values of the expressions will be output to standard output. Due to the argument processing done by the shell, the *expressions* must be enclosed in single quotes, and double quotes and backslashes must be preceded by backslashes.

@optionfile

substitutes the contents of optionfile as arguments. Each line of optionfile is treated as a separate argument to ${f clisp}$.

REFERENCE

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The language implemented conforms to
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Guy L. Steele Jr.: Common Lisp - The Language.

Digital Press. 1st edition 1984, 465 pages.

("CLtL1" for short)

and to the older parts of

Guy L. Steele Jr.: Common Lisp - The Language.

Digital Press. 2nd edition 1990, 1032 pages.

("CLtL2" for short)

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USE

help to get some on-line help.

(apropos name)

lists the symbols relating to name.

(exit) or (quit) or (bye)

to quit clisp.

EOF (Ctrl-Z)

to leave the current read-eval-print loop.

arrow keys

for editing and viewing the input history.

Tab key

to complete the symbol's name you are just typing.

FILES

lisp.exe

main executable

lispinit.mem

initial memory image

config.lsp

site-dependent configuration

*.lsp lisp source

*.fas lisp code, compiled by **clisp**

*.lib lisp source library information, generated and used by the clisp compiler

ENVIRONMENT

COMSPEC (DOS, OS/2 implementations only)

is used to find the command interpreter called by the function shell.

TERM

specifies the terminal emulation **clisp** relies on. If you have ANSLSYS loaded, possible values are *ansi*, *ansi-color-2*, *ansi-color-3* and *mono*.

TERMCAP

should be set to the slashified file name of the terminal capabilities database termcap.dat.

SEE ALSO

cmulisp(1), emacs(1).

BUGS

The function inspect is not implemented.

Only very few extensions from CLtL2 are supported.

No on-line documentation beyond apropos and describe is available.

Stack overflow aborts the program ungracefully, with a register dump.

Pressing Control-C may not interrupt **clisp** in every situation.

Calling the function EXECUTE on batch files crashes the machine.

PROJECTS

Writing on-line documentation.

Building a foreign function interface (ability to call C code directly).

Write inspect.

Enhance the compiler such that it can inline local functions.

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Specify a portable set of window and graphics operations.

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