

NAME

`clisp` – Common Lisp language interpreter and compiler

SYNOPSIS

`clisp` [**-h**] [**-m** *memsize*] [**-M** *memfile*] [**-q**] [**-i** *initfile ...*] [**-c** [**-l**] *lispfile ...*] [**-x** *expression*]

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 **-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`.

-m *memsize*

Sets the amount of memory `clisp` tries to grab on startup. The amount may be given as *nnnnnnnn* (measured in bytes), *nnnnK* or *nnnnKB* (measured in kilobytes) or *nM* or *nMB* (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 *saveinitmem* function.

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

-i *initfile ...*

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

-c *lispfile ...*

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

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

-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 `clisp`.

REFERENCE

The language implemented conforms to

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)

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 ANSI.SYS 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.

Specify a portable set of window and graphics operations.

AUTHORS

Bruno Haible <haible@ma2s2.mathematik.uni-karlsruhe.de> and Michael Stoll.