

**NAME**

`clisp` — Common Lisp language interpreter and compiler

**SYNOPSIS**

**clisp** [ **-h** ] [ **-m** *memsize* ] [ **-M** *memfile* ] [ **-L** *language* ] [ **-q** ] [ **-I** ] [ **-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 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.

**-L** *language*

Specifies the language **clisp** uses to communicate with the user. This may be **english**, **deutsch**, **francais**.

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

**-I** ILISP friendly: **clisp** interacts in a way that ILISP (a popular Emacs LISP interface) can deal with. Currently the only effect of this is that unnecessary prompts are not suppressed.

**-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

### CLISP\_LANGUAGE

specifies the language **clisp** uses to communicate with the user. The value may be **english**, **deutsch**, **francais** and defaults to **english**. The **-L** option can be used to override this environment variable.

### 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.

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