

NAME

mavscript – With Mavscript you can do calculations in a text document.

SYNOPSIS

mavscript [*Option*]... *TemplateFile*

DESCRIPTION

With Mavscript you can do calculations in a text document. Mavscript processes template files containing text + algebraic expressions (or java code). *Text* files, OpenDocument Text *odt*, OpenOffice Writer (1.x) *sxw*, *html* and other text based formats (i.e. *svg*) are supported. The text file may be packed in a zip-archive.

How it works: Mavscript reads the calculation commands in the template. These commands start with the control characters **\$m** and end with one of the following control characters: **\$i** (print input), **\$o** (print output), **\$io** (print both input and output) and **\$n** (do not print anything). The commands are forwarded to a Computer-Algebra-System. The algebra program returns an answer to Mavscript, i.e. the result of the calculation command. Mavscript now can insert this answer in the text, where the command was.

The standard engine is the built-in computer-algebra-system *Yacas*. The built-in java-interpreter *BeanShell* may be used instead. The third option is to connect to a *port* (on localhost or on a remote server).

Options

-v, --verbose

Verbose output

-q, --quiet

No messages to stdout

-l, --language

Language (i.e. *en*)

-h, --help

print help message, then exit

-V, --version

Display version

-y, --yacas

Yacas (default).

-b, --beanshell

Beanshell.

-p, --port PortNumber

Port (i.e.: **9734**). Connects to a remote server program.

-s, --server ServerAddress

Server name (default: **127.0.0.1**)

-z, --name_in_zip FileName_inside_zip

File name within ZIP. If the template is an OpenOffice-Writer file (suffix *.odt* or *.sxw*) the option "-z content.xml" can be omitted, as it is set automatically.

-i, --init InitFile

First processes the commands of this file

-H, --HTML

Accepts HTML special characters (like *>*). If the template file has the suffix *.odt*, *.sxw* or *.html* this option can be omitted, as it is set automatically.

-A, --ascii

Converts unicode chars to a ascii representation. Non-Ascii chars in commands will be converted to a hexadecimal format (i.e. *omega* to *escu03c9*) before beeing sent to the Computer-Algebra-System. The answer will be converted back when inserted in the text. Not needed if engine supports unicode (i.e. *BeanShell*).

- C, --charset** Encoding
Charset name (default: **UTF-8**). Examples: **ISO-8859-1**, **system**
- D, --controlchar** \$-replacement
By default Mavscript uses the control characters *\$m* and *\$i*, *\$io*, *\$o* or *\$n*. Instead of the \$-sign, an other sign (or a character string) may be used. Examples: %, %%
- x, --extract**
Writes the commands to the OutputFile. No calculation is done.
- o, --outfile** OutputFileName
OutputFile name (default: **out.TemplateName**) or - to redirect to stdout.

Examples

Start **mavscript** using one of the following commands.

mavscript template.txt

Mavscript processes the file template.txt. The internal computer-algebra-system *Yacas* is used.
Writes the file *out.template.txt*

mavscript template.odt

Writes the OpenDocument-text out.template.odt (OpenOffice >=2)

mavscript /home/<user>/template.sxw

Writes the OpenOffice (1.x) text /home/<user>/out.template.sxw

mavscript --init ./StdFunctions.ys template.odt

Before processing template.odt the instructions in StdFunctions.ys are passed to the computer-algebra-system.

mavscript -o result.odt template.odt

The output file will be result.odt (instead of out.template.odt)

mavscript --port 9734 template.txt

Mavscript tries to connect to the port 9734 on localhost. A computer-algebra program (i.e. yacas) should be running and listening to this port.

cat template.txt | mavscript > out.template.txt

Mavscript reads from *stdin* and writes to *stdout*.

AUTHOR

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REPORTING BUGS

Report bugs to <qwert2003@users.berlios.de>.

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SEE ALSO

The documentation for **mavscript**, example files and the source code can be found in the directory */usr/share/doc/packages/mavscript/* or wherever the program is installed.

Internet: <http://mavscript.berlios.de>