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

-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**)

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.

AUTHOR

Written by Adrian Vontobel.

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*