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.

-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.txt ./template.odt*
>> Before processing template.odt the instructions in StdFunctions.txt are passed to the computer-algebra-system.

> *mavscript -o result.sxw ./template.sxw*
>> The output file will be result.sxw (instead of out.template.sxw)

> *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
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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*