## Man Pages for JS/UIX 0.45

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```

```
* Synopsis:
alias <name> {<value>}
sets an alias that will be used as a command.
aliases can be discarded using "unset".
if called without arguments, all set aliases are listed.
* Arguments:
    <name>
             the name of the alias. names must begin with a letter
             and use only the characters "A"-"Z", "0"-"9" or " ".
             the value of the alias.
apropos
* Synopsis:
apropos <command>
displays a short description of a command.
* Arguments:
    <command> command name.
browse
* Synopsis:
browse [-n] [<url>]
opens a given url in a new browser window.
if no url was specified, a standard site is called (<a href="http://www.masswerk.at">http://www.masswerk.at</a>).
* Arguments:
    <url> url of a website. protocol defaults to http.
* Options:
    -n open in a new browser window. (with JS/UIX 0.3x default value!)
cal
* Synopsis:
cal [-w] [[<month nr>] [<year>]]
displays a monthly calendar.
defaults to current month and year if no arguments specified.
* Arguments:
                number of month (1..12), default current month.
    <month nr>
                year (1900..9999), default current year.
* Options:
    -w show week numbers.
cat
* Synopsis:
cat <filelist>
concatenate files
joins any specified files to a new stream.
any lines in STDIN will preceed the content of theese files.
```

```
* Arguments:
   <filelist> any number of file-paths separated by spaces.
cd
* Synopsis:
cd [<dirname>]
change directory to given path.
if called without argument, the current working directory will be set to the
value of $HOME.
path/name-conventions:
    "/" = file-separator
    "." = current directory
    ".." = parent directory.
chmod
* Synopsis:
chmod [-R] <mode> <filelist>
where <mode> is octal number or \{u|g|o|a\}(+|-)\{w|r|x|s\} or \{u|g|o|a\}=(o|u|g)
change a files's permissions for read, write or execute.
* Arguments:
    <filelist>
                file(s) to be set (you must be the file's owner).
    <mode>
                either an octal number representing a bit-vector,
                where position "x" stands for:
                  00x00 ... user (owner of the file)
                  000x0 ... group
                  0000x ... others
                  0x000 ... sticky-bit
                and "x" is a 3-bit value (0-7),
                where a set or unset bit represents permissions for:
                  4 ... read
                  2 ... write
                  1 ... execute
                or in the form of \{u|g|o|a\}(+|-)\{w|r|x|s\},
                where the first part represents the "who"-part as:
                  u ... user
                  q ... group
                  o ... other
                  a ... all
                to be either set (+) or unset (-) to the third part as:
                  w ... write
                  r ... read
                  x ... execute/search
                  s ... sticky-bit
                or in the form of \{u|g|o|a\}=(o|u|g),
                where the first part represents the "who"-part as above
                to be set to the value of the third part.
                (the current version does not support setUID or setGID.
                these bits will be ignored.)
* Options:
    -R recursive (include nested files and directories).
```

```
clear
* Synopsis:
clear
clears and resets the terminal display.
ср
* Synopsis:
cp [-ipr] <sourcefile> {<sourcefile>} <target>
copy files from source- to target-file.
* Arguments:
                  file(s) or directories to be copied
    <sourcefile>
                  if called with multiple source-files the target must be
                  the file name of the new file or the name of a directory.
    <target>
* Options:
    -i ignore error warnings
    -p copy file permissions
    -r recursive - include nested files
date
* Synopsis:
date [-l|u] [+format]
diplays the date and time as local (default) or UTC
as: weekday, day month year hours:minutes:seconds [UTC]
the output can be formated by an optional format-string.
* Arguments:
    <format>
              a string consisting of any of the following characters:
    %%a
               week-day abrv., Sun-Sat
               day, 1-31
    %%d
    %%D
               date as mm/dd/yy
    %%h
               month abrv., Jan-Dec
    %%H
               hours, 00-23
               year-day, 001-366
    %%j
               month, 01-12
    %%m
    %%M
               minutes, 00-59
   %%n
               new line
               time in AM/PM
    %%r
               seconds, 00-59
    %%S
               tab (insert space)
    %%t
               time as hh:mm:ss
    %%T
    %%W
               week-day, 0-6, Sun=0
    %%V
               last two digits of the year, 00-99
    example:
              date +%D%t%T
              gives "11/05/03 16:50:01"
* Options:
    -l local time (default)
    -u UTC time
```

echo

```
* Synopsis:
echo [<args>]
writes the given arguments back to the terminal
* Arguments:
    <args> any text separated by any amount of space.
exit
* Synopsis:
exit
exits the current shell.
if the current shell is the login-shell, the session is closed.
features
* Synopsis:
features
displays the features of this application.
fexport
* Synopsis:
fexport
file-export and backup.
exports the files and directories residing in the home-directory (as set in
$HOME) to a browser form for later re-use. copy this data and keep it on your
local machine for later import. (hidden files won't be exported.)
you can mount exported files and directories with "fimport".
fimport
* Synopsis:
fimport
imports/mounts exported files and directories to the current home-directory.
if files or directories with the same name exist, these will have precedence
over any files on the import-list. timestamps will be set according to import-
data. this may back-date directories with newer content.
see "fexport" for exporting data.
hallo
* Synopsis:
hallo
displays a short information about this system.
halt
* Synopsis:
halt
halt / shut down the system
```

```
hello
* Synopsis:
hello
displays a short information about this system.
help
* Synopsis:
help
displays a help screen with a short list of available commands.
info
* Synopsis:
info
displays information about this site.
aliases: "masswerk", "mass:werk".
invaders
* Synopsis:
invaders
starts the well kown arcade game: space invaders for JS/UIX.
please note that there is only one life and only one shot at a time.
usage: use cursor <LEFT> and cursor <RIGHT> to move, press <SPACE> to fire.
(alternatively you may use the vi-movements "h"=left and "l"=right.)
press "p" for pause, "q" or <ESC> to quit.
js
* Synopsis:
js -l[t]|t <varname>
is -s[n] <varname> <value>
is -e <expression>
javascript evaluation (no user command, experts only!).
lists or sets javascript objects and object properties, evaluates expressions.
CAUTION: an error in an eval-string will cause an javascript-error bringing
down the JS/UIX-system! setting a variable may override and harm the system.
* Arguments:
                  name of a variable, object or property
    <varname>
                  may be in form of "varname", "varname[index]",
                  "varname.prop[index]", "varname[index][index]" and so on.
                  a numeric or string value for set (option -s)
    <value>
                 expression to be evaled (option -e)
    <expression>
* Options:
    -l[t]
          list an object or property
           set an object's value or object's property's value
    -s[n]
           "-sn" for numeric (plain) value (default: string)
           report object's type or object's property's type
    -t
           eval expression (use single quotes to hide specials from shell)
```

```
logname
* Synopsis:
logname
displays the current user name
ls
* Synopsis:
ls <dirname>
lists a directory.
* Arguments:
               ralative or absolute file path.
    <dirname>
               if called with option "i" or "l" also the name of a plain file.
* Options:
    -C force output to colums
    -F show file type (appended to filename)
        "/" ... directory
        "*" ... executable
"@" ... link
        <nothing> ... plain file
       force output to one file by line
    -a show hidden '.'-files.
    -i show inode-id (file serial number)
       long output, format:
        "mode inodes user group bytes mdate [YYYY/MM/DD hh.mm:ss] name"
mail
* Synopsis:
mail [<user@host>]
opens a mail window to given address or the webmaster if none specified.
* Arguments:
    <user@host> mail address.
man
* Synopsis:
man <command>
displays a manual page for system commands.
if an entry for the command is found, it will be displayed using the standard
pager.
* Arguments:
    <command>
               command name.
               for an alias its value is displayed.
* Options:
    -p opens a new browser window with the full list.
```

mkdir

```
* Synopsis:
mkdir <dirname> {<dirname>}
make one or more new directory/ies
* Arguments:
    <dirname>
              directory/ies to be inited
more
* Synopsis:
more <filename>
displays the specified file in a pager. if used in a pipe, any lines in STDIN
will preceed the content of any specified file. Any outgoing lines in STDOUT
will be stripped off of any type-styles.
for navigation use
    <SPACE> for the next page, or
    "a"
             for quit
mv
* Synopsis:
mv [-i] <filename> {<filename>} <target>
move (rename) files from source to target.
* Arguments:
    <filename>
                file(s) or directories to be moved
                if called with multiple files the target must be a directory
                the file name of the new file or the name of a directory.
    <target>
* Options:
    -i ignore error warnings
news
* Synopsis:
news
displays system-news and information on recent changes. (displays /etc/news)
pager
* Synopsis:
pager <filename>
synonym for "more".
=> see "more".
pg
* Synopsis:
pager <filename>
synonym for "more".
```

```
=> see "more".
pr
* Synopsis:
pr <filelist>
print files (to a new browser window) - ready for copy&paste.
* Arguments:
    <filelist>
                list of files to be printed.
                any content of a lefthand pipe will preceed the content of
                these files.
ps
* Synopsis:
displays a list of active processes with PID (Process-ID) and name.
pwd
* Synopsis:
pwd
print working directory.
outputs the path of the current working directory.
reboot
* Synopsis:
reboot
halt and reboot the system
rm
* Synopsis:
rm [-ir] <filename> {<filename>}
remove (discard) files.
use "rmdir" or "rm -r" for directories.
* Arguments:
    <filename> file(s) to be removed
* Options:

    i ignore error warnings

    -r recursive - discard directories and included files
rmdir
* Synopsis:
rmdir [-i] <dirname> {<dirname>}
remove (discard) directories.
directories must be empty! use "rm -r" for populated directories.
```

```
* Arguments:
    <dirname> directory/ies to be removed
* Options:
    -i ignore error warnings
set
* Synopsis:
set [<varname> {<varname>} [= {<value>}]]
sets a variable in the command shell.
variables can be retrieved by "$<varname>" in any term not in single-quotes.
see "man sh" for more. to discard a variable use "unset".
if called without arguments all set variables and values are listed.
The system supports currently the following special variables:
 GID
           group-id
           home directory
 HOME
           login-host
 H0ST
 PATH
           command path
  PID
           process id of current process environment
  PS
           shell prompt
 UID
           user-id
 USER
           user-name
 VERSION os/term-version
* Arguments:
               the name of the variable. names must begin with a letter
    <varname>
               and use only the characters "A"-"Z", "0"-"9" or " ".
    <value>
               the value of the variable. use quotes and escapes ("\") for
               complex expressions.
               if no value is assigned, the variable holds an empty value.
sh
* Synopsis:
shell, commands, aliases, and variables.
A simple implementation of sh. As command opens a subshell.
Currently the following features are supported:
quotings, escapes, variables, aliases, pipes, subshells, simple scripts.
Quoting levels:
   double-guotes string with variable interpolation
   single-quotes literal string without interpolation
  backticks (`) will be expanded to the output processed by a subshell called
                  with this string as its arguments.
Commands may be separated by ";".
The pipe-character "|" will stream the output of the left side to the STDIN-
stream of the command on its right side.
The output redirector ">" writes the output of the command to a file specified
on its right side. ">>" appends the output to an existing file if any.
Order of Interpolation:
First all control-characters ("`", "|", ";", ">", ">>") will be traced, then
any terms in backticks will be evaluated in a new subshell and the return
values will be inserted and parsed as arguments.
Afterwards all variables of the current arguments will be expanded. If the
first argument is an alias, the alias will be expanded, its value parsed and
copied in front the first remaining argument.
```

In case a backslash ("\") is found at the end of a line, the line is

concatenated with the following one to a single line.

## Order of Execution:

If the now first argument is a shell-command (set, unset, alias, unalias, cd) it will be executed in the same shell.

Else, if an executable file with the name of the command is found in any directory specified in the PATH-variable, this command will be executed in a new sub-process spawned as child of the current shell. If the first argument contains a slash it will be interpretated as relative path-name of a binary or an executable shell-script to be processed in a new sub-shell. Finally, if the first-argument is not a valid file-name, an error message will

Finally, if the first-argument is not a valid file-name, an error message will be put to STDERR.

# Permissions, Modes:

In order to be executable a script or command must either be set to execute privileges for the effective user or group or - in the case of a script called in the form "sh <filename>" - with sufficient read permissions.

Permissions can be set using "chmod".

(Since the shell is the only script-language present, the \*magic cookie\* "#!/bin/sh" may be absent. Permissions take precedence.)

## Variable Interpolation:

Variables will be expanded in any double-quoted or unquoted term. Use \$<varname> or \${<varname>} to retrieve the value of any defined variable. variables can be hidden from the shell using single-quotes or escapes with backslash ("\").

#### Positional Parameters:

In shell-scripts the term \$<number> - where <number> is in the range 0-9 - expands to positional paramters. \$0 will expand to the command or script name while the variable \$1-\$9 will give the value of the first argument and so on.

Currently the system employs a number of special variables:

GID group-id HOME home directory HOST login-host PATH command path

PID process id of current process environment

PS shell prompt UID user-id

USER user-name (log-name) VERSION os/term-version

## Special Files, Command History:

There are two special files to the shell:

The first is "etc/profile" which is executed by the login-shell on start up for initialization.

The second one is "~/.history" where the command history is stored. (You can access the command history using cursor up/down in the command line.)

### \* Arguments:

## shell

# \* Synopsis: JS/UIX-shell

see "sh" for more.

=> see "sh".

```
splitmode
* Synopsis:
splitmode <mode>
displays a statusline to demonstrate screen splitting.
(splitting will be terminated by the next "clear" command.)
* Arguments:
           "on" switch statusline on
    <mode>
            "off" switch statusline off
stty
* Synopsis:
stty <option>
set terminal options.
* Options:
               list all options
    - a
               list all options in formated output
    -g
    [-]blink
               [no] cursor blinking
               [no] block cursor
    [-]block
    [-]smart
               [no] smart console (minimal scrolling)
    [-]rows n [re]set max. terminal line to n
               reset to sane values
    sane
su
* Synopsis:
su <username>
switch the user.
* Arguments:
                user, name must consist of the characters [A-Za-z0-9]
    <username>
                only the first 8 characters are recognized (rest ignored).
time
* Synopsis:
time [-l|u]
diplays the time as local (default) or UTC
as: hours:minutes:seconds [UTC]
* Options:
    -l local time (default)
    -u UTC time
touch
* Synopsis:
touch <filenamename> {<filenamename>}
set the file last modified date (mdate) to current time.
if the file does'nt exist an empty file be created.
```

```
* Arguments:
    <filenamename> name of the file to be modified or created.
type
* Synopsis:
type [-ipru|-n <num>] [<args>]
writes the given arguments back to the terminal in specified type style.
* Arguments:
    <args> any text separated by any amount of space.
* Options:
                 number representing the type style as a bit vector;
    -n <num>
                 for details see the other options identifying styles
                 by the following characters:
    - p
                 plain
                            (0)
                 reverse
                            (1)
    - r
                 underline (2)
    - u
                 italics
                            (4)
    -i
                 stroke
    - S
                            (8)
    -> example: "type -n 5 <args>" is same as "type -ir <args>".
unalias
* Synopsis:
unalias <name>
discards an alias defined by "alias".
* Arguments:
           the name of the alias. names must begin with a letter
    <name>
            and use only the characters "A"-"Z", "0"-"9" or "_".
uname
* Synopsis:
uname
displays the system identification
unset
* Synopsis:
unset <varname>
discards a variable defined by "set".
reserved variables must not be discarded. (see "man set").
* Arguments:
               the name of the variable. names must begin with a letter
    <varname>
               and use only the characters "A"-"Z", "0"-"9" or " ".
νi
* Synopsis:
vi [<filename>]
```

```
7/6/2020
                                        https://www.masswerk.at/jsuix/man.txt
 opens a (simple) implementation of the visual editor (vi).
 current beta restrictions: no numeral modifiers, no search expressions.
 as the standard vi this implementation is a modal application.
 use <esc> to enter movements, ":" to enter the command-line, or one of the
 insert-, append-, change-, replacement-keys to enter edit mode.
 <esc> brings you always back to movements; leave with ":q!" without changes.
 Basic Commands: (+<return>)
                       quit (if no changes made)
    :q[uit]
    :q[uit]!
                       forced quit, ignore changes
    :w [filename]
                       write [filename]
    :w! [filename]
                       forced write, overwrite existing files
    :wq[!] [filename]
                       forced write and quit
                       like "wq" - write only when changes have been made
    :x[!] [filename]
                       like "x"
    :ZZ
                       display first line
    :1
                       display last line
    :$
                       display line N
    : N
 Cursor Movements:
      left (or cursor)
                             k line up
                                           (or cursor)
       right (or cursor)
                             i line down (or cursor)
      go to the first character of the current line
       go to the first non-blank character of the current line
      go to the end of the current line
       go up one line and to the first non-blan character
      go down one line and to the first non-blan character
    w one word forward
      one word backward
      forward to end of word
       display current-line on top
 Editing Comands:
       append after cursor
       append after end of line
       insert before cursor
       insert before first non-blank character of the line
   Ι
       open a new line below the current line
       open a new line above the current line
   c[motion]
             change text (insert between old and new cursor position)
              (this command is currently restricted to the same line)
       change the current line
       change to the end of the current line
   C
       replace text
 Deleting, Copy and Paste, Undo:
       delete character under (and after) the cursor
   Χ
       delete character before the cursor
   dd
       delete current line and put it in the copy buffer
       delete to end of line
   J
       join lines (delete new line at end of the current line)
   Copy & Paste (currently restricted to lines only):
       yank current line (put to copy buffer)
       put (insert) copy buffer to end line after current line
       put (insert) copy buffer above current line
```

undo last change

This implementation accepts pipes as valid input. If called as "view" vi is opened in read only mode. \* Arguments: <filename> a file to be opened. view \* Synopsis: view [<filename>] synonym for "vi" in view-mode (read only mode). files must be saved with new name or changes will be lost. => see "vi". WC \* Synopsis: wc [-clw] word count. counts the characters, words, and lines of a specified file or from STDIN. \* Options: -c count characters -l count lines -w count words web \* Synopsis: web [-n] [<url>] synonym for "browse". => see "browse". which \* Synopsis: which <command> evaluates the command path for the given command. if the command is found it is displayed with full path-name. \* Arguments: <command> name of the command to be found. write \* Synopsis: write <args> writes the arguments back to the terminal using type styles. \* Arguments: any arguments (treated as strings separated by spaces). <args>

type styles can be specified as follows:

- -> example: write "Do not use %+rREVERSE%-r for 100% of the text."
- (c) mass:werk 2003; <http://www.masswerk.at>