

Zsh Cheat Sheet

Notation

This reference card is using the Emacs notation of keys. C- is the prefix for control. M- is the meta prefix, for example the Alt key on a PC. You can also press ESC to access meta command. For example M-w and ESC w are equivalent.

Changing Directories

There is no need to type cd to navigate between directories if you have set the auto_cd option.

There is a shortcut for changing between similarly named directories. If you type cd old new, then the shell will look for the first occurrence of the string old in the current directory, and try to replace it with new. For example:

```
% pwd
/src/zsh-3.0.8/Src
% cd 0.8 1.9
/src/zsh-3.1.9/Src
```

Key Bindings

delete the line	C-u
set mark	C-SPACE
copy from point to mark	M-w
kill-from point to mark	C-w
copy the previous word	C-M-/
look in history for match of word on line	M-p
push line to be used again	C-q
extract last word from history	M-.
paste text from kill ring	C-y
display command bound to a key	M-x where-is

C-u can also be used to clear a password that you typed wrong.

If you hit M-. cycle repeatedly it will look back in history for previous last word in history.

After pressing C-y you can press several times on M-y. It will cycle through the previous cut or copy (just like emacs.)

You can see the list of all binding just by running bindkey.

```
bind string          bindkey -s agi 'apt-get install'
bind C-w            bindkey ^w where-is
bind M-a            '\eA' backward-word
remove key binding C-b  bindkey -r ^b
```

History

prints the start time of the history	history -d
prints that as well as the date	history -f
prints the command's elapsed time	history -D

Setting the share_history option will share history between sessions of zsh. The extended_history option will save the the command start and duration time. You can skip duplicate entries with the hist_ignore_all_dups option.

Basic Glob Matching

any string	*
any character	?
any single character from class	[class]
any single character not from class	[^class]
any number between 1 and 3	foo<1-3>
alternatives	(foo bar)

Glob Qualifier

The simplest glob qualifiers is similar to the indications displayed by ls -F

file	*(.)
directory	*(/)
executable	*(*)
symbolic links	*(@)

You can also pick files by modification (m) or access (a) time, either before (-), at, or after (+) a specific time, which may be measured in days (the default), months (M), weeks (w), hours (h), minutes (m) or seconds (s). These must appear in the order m or a, optional unit, optional plus or minus, number.

```
print *(m1)
```

Files that were modified one day ago i.e. less than 48 but more than 24 hours ago.

```
print *(aw-1)
```

Files accessed within the last week, i.e. less than 7 days ago.

There is also the (u) and (g) that lets you match on a given user or group.

```
print /var/*(~u:root)
```

All files in /var that are not owned by root.

Recursive Glob

recurse directories	**
recurse and follow symlinks	***

```
ls -l **/README
```

Search for 'README' in all subdirectories.

```
rm -f **/*(mh+6)
```

Deletes recursively all files more than 6 hours old.

Extended Glob Matching

These only work with the option extended_glob set.

negative matches ~*.o

Matches all file except the one ending in .o.

match all file A minus pattern B A~B

```
ls *~*.*(.)
```

Matching all files which do not have a dot in filename

zero or one occurrences of foo	(foo)
zero or more occurrences of foo	(foo)#
one or more occurrences of foo	(foo)##

Completion

Zsh comes with a powerful completion system available when pressing the TAB key.

```
echo $P TAB
```

List all variable beginning with P.

```
acoread foo TAB
```

List all document ending in .pdf and starting with foo.

```
dpkg -l ad TAB
```

List all Debian packages starting with ad.

```
tar xjf zsh.tar.bz2 zsh-4.3.12/Doc TAB
```

Expands a directory starting with Doc within the tar file.

Redirection

```
date > foo > bar
```

Writes the date to two files, named foo and bar.

```
echo exit 0 >> *.sh
```

Append exit 0 a the end of each shell file.

Options

```
setopt auto_cd
```

When you type something with no arguments which isn't a command, if it matches a directory it will move in it.

```
setopt extended_glob
```

Enables extended glob.

```
setopt correct
```

The shell will propose a command that will loosely match what you have mistyped.

```
setopt no_beep
```

Turn off beep on completion.

```
autoload -Uz compinit compinit
```

Use modern completion system, highly recommended!

```
unsetopt chase_links
```

Don't resolve symbolic links to their true values.

Zmv

You need to run autoload zmv in order to use this command.

The -n argument does a dry run, i.e. prints what would be done and -C does a copy instead of a move.

```
zmv '(*) .txt' '$1.tex'
```

Rename all file ending in .txt to .tex.

```
zmv -W '*.txt' '*.tex'
```

The same with automatic wildcard match.

```
zmv '(*)foo(*)' '$1bar$2'
```

Change part of files from file-foo.name to file-bar.name

Miscellaneous

print out function	which _tar
edit variable	vared PATH
edit function in place	zed -f function_name