

APPENDIX A vi Reference

This appendix contains a short description of

- vi Modes

and commands for the following tasks:

- Save File, Quit
- Move Cursor
- Insert Text
- Delete Text
- Change Text
- Copy (Yank) and Paste
- Use Buffer
- Use Marker
- Search and Replace
- Use Regular Expressions
- Repeat
- Use Regions
- Work with Files
- Others

vi Modes

- **Command mode.** Start mode of vi, for entering commands.
- **Insert mode.** For entering text; is started by a change or insert command and left again by pressing **Esc**.
- **Command line mode.** For entering commands in the command line; commands are run only by pressing **Return**.

Save File, Quit

To save files and quit vi, use the following commands:

Table A-1

Command	Description
:x or :wq	Save and close
:q	Close if nothing was changed
:q!	Close, ignore changes

Move Cursor

To move the cursor, the use following commands:

Table A-2

Command	Description
:h, j, k, l	Left, down, up, right
w	Beginning of the next word
W	Beginning of the next word separated by space
b	Beginning of the previous word
B	Beginning of the previous word separated by a space

Table A-2

Command	Description
e	End of the next word
E	End of the next word separated by a space
0, \$	Beginning, end of line
1G, G	Beginning, end of file
<i>n</i> G	Go to line <i>n</i>
f <i>c</i> , F <i>c</i>	Forwards, back to the character <i>c</i>
H, M, L	Go to top, middle, end of page

Insert Text

To insert text, use the following commands:

Table A-3

Command	Description
i, I	Insert text before the cursor, at beginning of line
a, A	After cursor, at end of line
o, O	Insert new line below, above cursor
r, R	Replace one, many characters

Delete Text

All delete commands start with `d`, followed by a movement command; as describe in the following:

Table A-4

Command	Description
<code>dw, db</code>	Delete the word after, before the cursor
<code>D</code>	Delete to end of the line
<code>dd</code> or <code>:d</code>	Delete line
<code>x, X</code>	Delete current, previous character

Change Text

The change command starts with `c`, followed by a movement command; as described in the following:

Table A-5

Command	Description
<code>cw</code>	Change a word
<code>C</code>	Change text to the end of the line
<code>cc</code>	Change entire line

Copy (Yank) and Paste

Most copying commands are performed by pressing `y`, followed by a movement command; as described in the following:

Table A-6

Command	Description
<code>y\$</code>	Copy (yank) text to end of line

Table A-6

Command	Description
yy or :y	Copy line
p	Insert text after the current cursor position or line
P	Insert text before current cursor position or line

Use Buffer

Buffer names can be used for each delete, modification, copy, or re-insert command.

The general form is "*c*", whereby *c* can be any small letter.

For example, "**adw**" deletes a word and saves it to buffer a. It can then be restored with the re-insert command "**ap**".

Use Marker

Markers can be set on all lines in a file.

Any small letter is a permitted marker name.

Markers can also be used in regions.

To use markers, the following commands are available:

Table A-7

Command	Description
m <i>c</i>	Set marker
' <i>c</i>	Go to marker

Search and Replace

To search and replace, use the following commands:

Table A-8

Command	Description
<i>/string, ?string</i>	Search forward, backward
n, N	Repeat search in the same, opposite direction
r, s	Replace character with a different character, string
cc, C	Replace line, rest of line
<i>:s/old/new/options</i>	Search for <i>old</i> and replace with <i>new</i>
g, c	Options: all occurrences in a line, confirm
&	Repeat the last “:s” command

Use Regular Expressions

The following keystrokes are available:

Table A-9

Command	Description
.	(dot) Any character apart from “new line”
*	0 or more occurrences
[...]	Any character from a group of characters
[^ ...]	Any character not from the group of characters
^, \$	Beginning, end of a line

Table A-9

Command	Description
<code><</code> , <code>></code>	Beginning, end of a word
<code>\(...\)</code>	Group
<code>\n</code>	Contents of the <i>n</i> th group

Repeat

For almost every command a repeat factor can be given, specifying how often it should be performed.

For example, **5dw** deletes five words and **3fe** moves the cursor to the third occurrence of the character e.

Even inserts can be repeated in this way, for example, to insert the same line 50 times.

Use Regions

You can use regions for most commands in the command line mode, which then limit the commands to the corresponding lines.

For example, **:3,7d** deletes lines 3–7.

Regions are often used with the replace command `:s`; for example, **:\$s/old/new/g** performs replacements from the current line to the end.

The following commands are available:

Table A-10

Command	Description
<code>:n,m</code>	Lines <i>n-m</i>
<code>::</code>	Current lines

Table A-10

Command	Description
:\$	Last line
: <i>c</i>	Marker <i>c</i>
:%	All lines
:g/ <i>string</i> /	All matching lines

Work with Files

To work with files, use the following commands:

Table A-11

Command	Description
:w <i>file</i>	Save <i>file</i> (current file if no name is given)
:r <i>file</i>	Insert <i>file</i> after the current line
:n, :N	Change to the next file, previous file
:e <i>file</i>	Edit <i>file</i>
:e!	Reload file (despite changes)
!! <i>program</i>	Replace line with <i>program</i> output

Others

The following are further useful commands:

Table A-12

Command	Description
~	Switch to upper case/lower case
J	Join lines together

Table A-12

Command	Description
. (dot)	Repeat last command
:u	Undo last change
u, U	Undo all changes in the current line
:!	Switch into a shell (shell escape)

