

Mastering Modern Linux by Paul S. Wang

Vi Quick Reference

Entering and Exiting vi

vi <i>file</i>	Edits <i>file</i> .
vi +n <i>file</i>	Edits <i>file</i> , cursor at line <i>n</i> .
vi + <i>file</i>	Edits <i>file</i> , cursor at end.
vi -r	List system saved files.
vi -r <i>file</i>	Edits system saved <i>file</i> .
vi <i>file</i> ...	Edits first <i>file</i> ; rest via :n .
vi -t <i>tag</i>	Edits file through <i>tag</i> in tags file.
vi +/pattern <i>file</i>	Edits file, cursor at <i>pattern</i> .
view <i>file</i>	vi <i>file</i> , no modification.
ZZ	Exits from vi , saving changes.
~Z	Stops vi for later resumption.

The Display

Last line	Error messages, echoing input to commands: / , ? , : , ! , feedback about I/O and large changes.
@ lines	On screen only, not in file.
~ lines	Lines past end of file.
^x	Control characters.
TABs	Expands to spaces, cursor on last space.

Counts before vi Commands

Line/column no.	z , G ,
Scroll amount	^D , ^U
Replicate insert	a , i , A , I
Repeat effect	Most rest

Vi States

Command mode	Executes commands; the normal and initial state. Other modes return to command mode. ESC cancels a partial command.
Insert mode	Entered by a , i , A , I , o , O , c , C , s , S , R , followed by arbitrary text terminated by ESC . An interrupt aborts an insertion.
Last line	Reads user input for commands / , ? , : , ! , which terminates in ESC or RETURN . An interrupt aborts.

Basic Commands

<code>dw</code>	Deletes a word.
<code>de</code>	Deletes a word leaving punctuation.
<code>dd</code>	Deletes a line.
<code>3dd</code>	Deletes three lines.
<code>d%</code>	Deletes to matching parenthesis/bracket
<code>i textESC</code>	Inserts <i>text</i>
<code>cw textESC</code>	Changes word to <i>text</i>
<code>ea.sESC</code>	Pluralizes word.
<code>xp</code>	Transposes characters.

Interrupting, Cancelling, Shell Interaction

<code>ESC</code>	Ends insert, input, or incomplete command.
<code>~?</code>	(DELETE) interrupts vi .
<code>~Z</code>	Suspends vi (<i>ssh</i> and <i>ksh</i>).
<code>:sh</code>	Runs default Shell, then returns.
<code>!:cmd</code>	Runs Shell-level <i>cmd</i> , then returns.

File Manipulation

<code>:w</code>	Writes back changes.
<code>:wq</code>	Writes and quits from vi .
<code>:q</code>	Quits from vi .
<code>:q!</code>	Quits, discards changes.
<code>:e file</code>	Edits <i>file</i> .
<code>:e!</code>	Reedits, discards changes.
<code>:e + file</code>	Edits <i>file</i> , starting at the end.
<code>:e +n file</code>	Edits <i>file</i> starting at line <i>n</i> .
<code>:w file</code>	Writes to <i>file</i> .
<code>:w! file</code>	Overwrites <i>file</i> .
<code>:n</code>	Edits next file in argument list.
<code>:n args</code>	Specifies new argument list.
<code>:f</code>	Displays current file and line.
<code>^G</code>	Synonym for <code>:f</code> .
<code>:ta tag</code>	Goes to tags file entry <i>tag</i> .
<code>^]</code>	Same as <code>:ta</code> , but current word is <i>tag</i> .

Positioning within File

<code>^F</code>	Moves forward a screen.
<code>^B</code>	Moves backward a screen.
<code>^D</code>	Scrolls down half a screen.
<code>^U</code>	Scrolls up half a screen.
<code>kG</code>	Goto line <i>k</i> or last line (default).
<code>/patternESC</code>	Searches forward for <i>pattern</i> .
<code>?patternESC</code>	Searches backward for <i>pattern</i> .
<code>n</code>	Repeats last / or ?.
<code>N</code>	Repeats last / or ? in other direction.
<code>/pattern/+n</code>	Goto <i>n</i> th line after <i>pattern</i> .
<code>?pattern?-n</code>	Goto <i>n</i> th line before <i>pattern</i> .

]]	Next section or function.
[[Previous section or function.
%	Finds matching (,), {, or }.

Adjusting the Screen

^L	Clears and redisplay.
^R	Redisplay, eliminates @ lines.
zRETURN	Current line at window top.
z-	Current line at window bottom.
z.	Current line at window center.
/pattern/z-	Line with <i>pattern</i> at bottom.
zn	Uses <i>n</i> line window.
^E	Scrolls window down one line.
^Y	Scrolls window up one line.

Marking and Returning

‘ ‘	Returns to previous context.
’ ’	Returns to previous context at first nonblank character of the line.
m <i>x</i>	Marks position with letter <i>x</i> .
‘ <i>x</i>	Returns to marked position <i>x</i> .
’ <i>x</i>	Returns to <i>x</i> at first nonblank character in line.

Line Positioning

:.=	Displays current line number
H	Moves to the first window line.
L	Moves to the last window line.
M	Moves to the middle window line.
+	Next line.
-	Previous line.
RETURN	Same as ‘+’.
↓ or j	Next line, same column.
↑ or k	Previous line, same column.

Character Positioning

^	First nonblank character.
0	(zero) Beginning of line (column one).
\$	End of line (last character).
h or ←	Previous character.
l or →	Next character.
^H	Same as <i>leftarrow</i> .
SPACE	Same as →.
f <i>x</i>	Finds <i>x</i> forward in current line.
F <i>x</i>	Finds <i>x</i> backward in current line.
t <i>x</i>	Moves forward upto <i>x</i> in current line.
T <i>x</i>	Moves backward upto <i>x</i> in current line.

;	Repeats last <code>f F t</code> or <code>T</code>
,	; in the reverse direction.
	Moves to specified column.
%	Moves to matching (, {,), or }.

Words, Sentences, Paragraphs

w	Next word.
b	Moves backward to the beginning of a word.
e	End of word.
)	Next sentence.
}	Next paragraph.
(Moves backward to the beginning of a sentence.
{	Moves backward to the beginning of a paragraph.
W	Next blank delimited word.
B	Moves backward to the beginning of a blank delimited word.
E	End of blank delimited word.

Corrections During Insert

<code>^H</code>	Deletes last input character.
<code>^W</code>	Deletes last input word.
<i>erase</i>	Character erase, same as <code>^H</code> .
<i>kill</i>	Line kill, deletes entire input line.
<code>\</code>	Escapes character erase and line kill.
<code>ESC</code>	Ends insertion, back to command mode.
<i>interrupt</i>	Aborts insert (usually <code>^c</code>).
<code>^D</code>	Backtabs over blanks supplied by autoindent.
<code>^^D</code>	(hat then <code>^D</code>) Kills autoindent; autoindent remains effective for next line.
<code>0^D</code>	Kills autoindent; until next indent.
<code>^V</code>	Quotes any special character.

Insert and Replace

a	Inserts after cursor.
i	Inserts before cursor.
A	Inserts at end of current line.
I	Inserts before first nonblank character of current line.
o	Opens a line for insertion below current line.
O	Opens a line for insertion above current line.
<code>rx</code>	Replaces current character with <i>x</i> .
R	Overwrites characters.
~	Changes case of current character.

Operators (Double to affect lines)

d	Deletes text object.
c	Changes text object.
<	Left shifts text object.
>	Right shifts text object.
y	Yanks text object to buffer.

Miscellaneous Operations

C	Changes rest of line.
D	Deletes rest of line.
s	Substitutes characters.
S	Substitutes lines.
J	Joins lines.
x	Deletes characters.
X	Deletes characters before cursor.

Cut and Paste

p or " <i>x</i> p	Pastes deleted or buffer <i>x</i> text after current position/line.
P or " <i>x</i>	Pastes deleted or buffer <i>x</i> text before current position/line.
" <i>xy</i>	Copies (Yanks) text object to buffer <i>x</i> .
" <i>xd</i>	Deletes text object into buffer <i>x</i> .
yy	Yanks current line.
<i>nyy</i>	Yanks several lines.

Undo, Redo, and Retrieve

u	Undoes last change.
U	Restores current line.
.	Repeats last change.
" <i>np</i>	Retrieves <i>n</i> th last delete.