

# Using the Vi Editor in UNIX

Although for day to day editing of text you may want to use a fully featured editor with graphical user interface ([Visual Studio Code](#) is highly recommended), there are often times when you need to edit a file in place on a remote server or from the UNIX terminal. There are several alternatives but this tutorial will focus on Vi or Vim which is almost ubiquitously on any server.

## Opening and saving a file

A file is opened for editing by typing

```
vi <PATH TO FILE>
```

To save a file enter command mode by typing the `<escape>` key if in edit mode followed by `:`

Then you can type

```
:w writes file
```

```
:q quit
```

```
:q! quit and ignore any made changes
```

```
:wq write and quit or the shorthand :x
```

To save as a new file type

```
:w <NEW FILE PATH>
```

## Navigating

To move left, right, up and down use the arrow keys : `←→↑↓`

```
$ move to the end of a line
```

```
0 or ^ move to the beginning of a line
```

```
gg move to the beginning of the file
```

```
G move to the end of a file
```

```
NG move to line N where N is a number. Type a number followed by G
```

## Editing

Enter edit or insert mode by typing `i` (short for insert). This will start editing at the current cursor position.

Typing `o` will start a new line **after** the current line and enter insert mode

Typing `O` will start a new line **before** the current line and enter insert mode

To leave edit mode press the `<escape>` key

## Deleting

If in edit mode leave it by pressing the `<escape>` key.

`dw` deletes the current word

`dd` deletes the current line

`D` deletes to the end of the line from the current position

`dG` deletes from the current position to the end of the file

## Searching and replacing

Type `/` followed by the search text and `<enter>`. It will find the next match after the cursor, wrapping back to the top of the file if necessary.

Type `?` to search backwards instead

You can repeat the last search by typing `n`. Use `N` to search backwards.

To replace text enter command mode

`:%s/foo/bar/g` Change 'foo' to 'bar' on every line in the file

`:s/foo/bar/g` Change 'foo' to 'bar' on the current line

## Extra features in command or navigation mode

Enter command mode by typing the `<escape>` key if in edit mode followed by `:`

`:set nu` view line numbers

`:set nonu` remove line numbers

`u` under last change

`ctrl-r` redo last change

There is much more to vi than this but these cover the basics

## Useful resources

[Vi overview](#)

[Reference sheet](#)

[Online interactive tutorial](#)

[Test your vim knowledge](#)