

# INTRODUCTION TO LINUX

(in an HPC context)

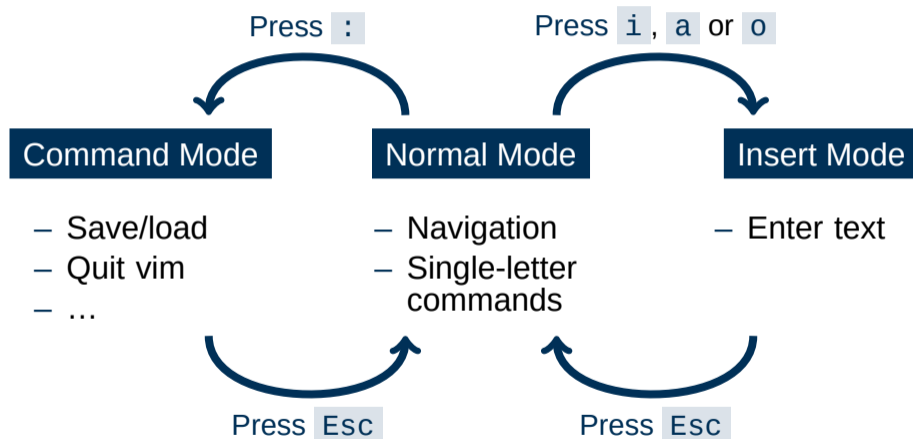
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# THE VIM TEXT EDITOR

HPC.NRW Competence Network

## INTRODUCTION TO LINUX

- Default Linux text editor: `vi`
  - Usually: `vim` (vi improved), includes syntax highlighting
- Completely inside console
- Advantages:
  - Always available
  - Very fast *once you know commands*
- Disadvantages:
  - Interface unlike most text editors
  - Steep learning curve



Opening: either `vim` or `vim <filename>`

`:w` Write (save) file

`:w <filename>` Write as new filename

`:wq` or `:x` or `ZZ` Write (save) file and quit

`:q!` Close file without saving

**<arrow keys>** move cursor in arrow direction

**h**, **j**, **k**, **l** move cursor left, down, up, right

**\$** Move to end of line

**gg** Move cursor to first line

**G** Move cursor to last line

**w** Jump forward to next word

**b** Jump backward to previous word

**%** Jump to matching character (default pairs: **( )**, **{ }**, **[ ]**)

**u** Undo last change

**<Ctrl-r>** Redo last change

**.** Repeat last command

**x** Delete character

**dd** Delete (cut) entire line

**yy** or **Y** Yank (copy) entire line

**p** Paste after cursor

**/pattern** Forward search for regular expression

**?pattern** Backward search for regular expression

**n** Repeat last search

**N** Repeat last search in opposite direction

**%s/old/new/** Replace **old** pattern with **new** pattern on current line

**%s/old/new/g** Replace **old** pattern with **new** pattern in entire file



- Most common vim problem: forgetting which mode you are in
  - Run commands when you meant to type text
  - Remember `u` for undo

**When in doubt: keep pressing Esc**

- When to use vim:
  - Either only for simple things
  - Or commit to learning it (worth it in the long run)

**Otherwise, you will spend a lot of time looking up commands**

If all else fails, vim usually still works

→ **Knowing vim basics is important for all Linux users**

However I don't blame you if you look for something simpler for everyday use

- Most Linux computers have at least one text editor in addition to vim
  - `gedit` (requires X window connection)
  - `nano`
  - `emacs` (also very powerful and hard to master)
  - Not on cluster but common: `kate` (graphical)
  - MobaXTerm: built-in text editor