Vim: The Underestimated Editor

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What is Vim?

- Modern version of the classic vi editor
- First released by Bram Moolenaar in 1991
- Still being maintained and extended
- **Modal** – The same keystrokes have different meanings depending on what mode you're in
- **Charityware** – author asks that you donate to children in Uganda – Vim is made for two good causes, free software and third-world development

What platforms are supported?

- Runs almost anywhere, but it's most at home on Unix/Linux, and is almost always packaged:
  - GNU/Linux
  - FreeBSD, OpenBSD, NetBSD
  - Mac OS X
- Everything works fine in Windows with GVim, but there's a lot less you can do with the command line

Who uses it?

- Has always been very popular with people who do a lot of text editing on servers (systems administrators) and also with C and assembly programmers

- Has recently become much more popular with people who write a lot of markup and scripting languages (such as web developers)

- A lot of people start using it for programming, and like it so much that they end up writing prose in it too

Why Vim?

- It's **really fast**, especially if you can touch-type
- Works over SSH, so you can edit on your computer from anywhere
- Vi is everywhere, so you'll never be stuck without an editor
- Uses as few keystrokes as possible to do as much as possible
- Treats text like objects for easy manipulation
- Integrates very well with the command line

Features

- Syntax highlighting for every major programming language
- Custom colorschemes
- Line numbers
- Search and replace with regular expressions
- Multiple windows and buffers
- Macros
- Scripting language
- Undo/redo
- Basic autocompletion
- ...more...

Demonstration

- Just to give you an idea of how the editor works and some things you can do with it

- Don't worry if you don't remember everything

- Demo in tmux on a Debian 7.0 "Wheezy" virtual machine

Installation

- Distributions sometimes ship with a "stripped-down" version that needs to be replaced with a full-featured one

- `# apt-get install vim`
  `# yum install vim`

- Even with most of its features enabled, it's still only around two megabytes in size

Syntax highlighting and filetypes

- Turn on filetype detection and syntax highlighting:

  ```
  filetype indent plugin on
  syntax enable
  ```

- It's a good idea to include this in your startup file: `/home/you/.vimrc`

Modes: Insert, Normal

- **Insert mode** for adding text – `i` or `a`
  - Repeat your previous action with .
- **Normal mode** for moving around – cutting, copying, pasting – `Esc`
  - `h`, `j`, `k`, and `l` to move (but arrow keys are OK)
  - Move by word: `W`, `B`
  - Move by sentence: `(`, `)`
  - Move by paragraph: `{`, `}`
  - Delete/cut with d, copy with y, paste with p
  - Undo with u, redo with ^R

Modes: Command, visual

- Command mode for file and batch operations – :
  - Save with :w, save as with :saveas <filename>
  - Load with :e <filename>
- Visual mode for selecting text
  - v to start Windows-style text selection
  - When you get good, you won't need this much

Searching and replacing

- Search with / and ? – use this to find text and also to navigate quickly

- * and # – quick search for keyword under cursor

- Search and replace regular expressions with:

  `:%s/search/replacement/g`

Calling commands

- Call commands with `:!`
  ```
  :!man vim
  :!git commit
  ```

- Read output of commands into the document:
  ```
  :r !date
  ```

- Filter text through a command:
  ```
  :% !nl
  :% !perltidy
  ```

- Temporarily drop to the command line:
  ```
  :sh
  ```

Some favourite plugins

- `surround.vim` – Quickly add, remove, or change parentheses, curly brackets, etc.

- `fugitive.vim` – Integration with Git version control

- `tabular.vim` – Line up blocks of text for readability

We've only scratched the surface

- Almost every key on the keyboard does something in normal mode

- There are literally hundreds of plugins on http://www.vim.org/ and https://github.com/

- VimScript: powerful scripting language; not for the faint of the heart; even advanced users very seldom need it

Questions?

- Vim website – http://www.vim.org/
- Why do those nutheads use Vi? – http://www.viemu.com/a-why-vi-vim.html
- Vimcasts – http://vimcasts.org/
- Reddit /r/vim – https://www.reddit.com/r/vim/