Linux System Administration

Editors

Getting Started with Linux



Goals

- Be able to edit a file using vi
- Begin to understand the "language" of configuration files
- Use alternate editors: ee,
 joe, pico, nano, emacs,
 xemacs, gedit, etc.



vi Philosophy

- It's available!
- Wait, what was that? Oh yeah, it's available!
- It's has some very powerful features.
- It's ubiquitous in UNIX and Linux (visudo, vipw, vigr, etc.)
- Not that hard to learn after initial learning curve.
- Impress your friends and family with your arcane knowledge of computers.

Why is vi "so hard to use"?

Like all things it's not really – once you are used to how it works.

The *critical* vi concept:

- 1. vi has two modes
- 2. These modes are *insert* and *command*

Let's see how we use these...

vi command and insert modes

Swapping modes

- When you open a file in vi you are in command mode by default.
- If you wish to edit the file you need to switch to insert mode first.
- To exit insert mode press the ESCape key.
- If you get used to this concept you are halfway done to becoming a competent vi user.

vi insert mode

Two common ways to enter insert mode upon opening a file include:

- Press the "i" key to start entering text directly after your cursor.
- Press the "o" key to add a new line below you cursor and to start adding text on the new line.
- Remember, to exit insert mode press the ESCape key at any time.

vi command mode

Many, many commands in vi, but some of the most common and useful are:

- Press "x" to delete a character at a time.
- Press "dd" quickly to press the line you are on.
- Press "/", and text to search for and press
 <ENTER>.
 - Press "n" to find the next occurrence of text.
 - Press "N" to find previous occurrences of text.

Saving a file or "How to exit vi"

- 1. In vi press the *ESC*ape key to verify you are in command mode.
- 2. Depending on what you want to do press:
 - : $\mathbf{w} \rightarrow \mathbf{w}$ write the file to disk
 - :wq → write the file to disk, then quit
 - :q → quit the file (only works if no changes)
 - :q! → quit and lose any changes made
 - :w! → override r/o file permission if you are owner or root and write the file to disk.
 - :w!q → override r/o file permission if you are owner or root and write the file to disk and quit.

Speed-Up your config file editing!

- 1. In vi press the *ESC*ape key to verify you are in command mode.
- 2. To search for the first occurrence of something:
 - /string → press <ENTER>
 - "n" → press "n" for each following occurrence
 - "N" → press "N" for each previous occurrence
- 3. To replace all occurrences of a string in a file:
 - •:%s/old string/new string/g
- 4. To replace all occurrences of a string in a file:
 - •:%s/old_string/new_string/gc

Speed things up some more!

- 1. In vi press the *ESC*ape key to verify you are in command mode.
- 2. Go directly to a specific line number
 - :NN \rightarrow press <ENTER>. If NN=100, go to line 100
- 3. Go to start/end of a line
 - press Home or press End on your keyboard
- 4. Go to top/bottom of a file:
 - press ctrl-Home or press ctrl-End on your keyboard
- 5. Undo the last change you made (in command mode)
 - press "u"

Other editors

<u>joe</u>

- Ctrl-k-h brings up the editor menu
- Ctrl-c aborts
- Cursors work as you expect

<u>ee</u>

- ESC brings up the editor menu
- Cursors work as you expect

Conclusion

vi's most confusing feature is that it works in two modes and you must switch between them.

Questions?

