

Emacs: Editor MACroS, more than just an editor by Guy Steele and Richard Stallman

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Emacs notation describes certain specific keystroke combinations

- ESC then x is the same as M-x
- Control and x together is annotated as C-x
- Control and h together followed by t would be C-h t
 - C-h t is the key sequence to start the Emacs tutorial.

GNU/Linux

Emacs the editor: What is an editor?

- Emacs is a development environment for programmers.
- Emacs helps users:
 - Write Code
 - Read a manual.(C-h i)
 - Browse news. (M-x gnus)
 - Create email.(C-x m)
 - Use an interactive shell. (M-x shell)
- Emacs allows its users to do operations on a file:
 - Open or create a new file. (C-x C-f)
 - Enter characters or material into a new file.
 - Modify an existing file.
 - Search and replace text with a file or set of files.
 - Call other programs to operate on the file.

There are 2 common editor choices in the UNIX programming environment:

- Emacs
 - Ported everywhere.
 - Extensible and customizable through elisp.
- Vi
 - System rescue environments often use vi.
 - Modal in its interface. Insert mode, append mode.

Realistically, it is best to learn at minimum a little of both.

- Emacs has
 - a built in free tutorial. (C-h t)
 - built in free Emacs manual.
 - Display UNIX manual pages also. (M-x man)
 - free documentation system for UNIX.
 - Elisp Interpreter.
 - Code navigation
 - Emacs can compare two files (M-x ediff)
 - File manager integration (M-x dired)
 - Debugger integration.(M-x gdb)
 - Can invoke make (M-x compile)
 - Version control integration
- Emacs has been around for 30+ years and is open source.

There is an Emacs like shell.

- The tcsh has an emacs like interface.
- Knowing emacs also allows one to transition easily to tcsh.

tcsh can be set to act like vi as well, just defaults to emacs.

Modes in Emacs tend to help maintain coding style

- Most major languages have indentation and spacing standards.
- Emacs modes tend to help maintain the standards.
- Completion keys promote mnemonic variable naming.

The Reference Card:

- 8x11 inch paper, double sided, command listing
- Broken into logical function areas.
- Can be used to learn emacs.
- Free.

GNU/Linux

Emacs: initialization, customization through .emacs file

- Start-up, initialization file is ~/.emacs
- Can be used to customize emacs behavior and start-up
- Written in elisp commands.
- Can expand functionality.
- Programmable.

Emacs can edit files on a remote server:

- Edits the files as if they were local.
- Uses a feature called Tramp
- Access remote files by
 /mylogin@remotehost:/remote/path/to/file
- Retrieves files securely over ssh or ftp.
- Saves the file when you are finished on the remote machine.
- Can also edit another user's files with their permissions locally.

Emacs maintains and international set of calendars

- Displays a three month calendar.
- Diary allows the creation of
 - Appointment reminders
 - Anniversary reminders
 - Keeps track of Holidays

Emacs Dired or Directory Editor Mode

- Allows various directory operations to be performed
 - ls in various formats
 - mv - move files
 - cp - copy files
 - ln - link files
 - operations on files
 - searches
 - Emacs macros allows a wide variety of programmable changes.

Emacs Summary

- Acts as an editor.
- Extendable by adding new features through Elisp functions
- Provides Integrated Development Environment for coders
 - Modes for programming languages with syntax highlighting
 - Integrated debugger
 - Integrated version control
 - Global search and replace across multiple files
 - Calls compiler via makefiles.
- Composes and reads email.
- Composes and writes news.