IT 1100 : Introduction to Operating Systems

Chapter 12

Text Editors

There are two types of text editors: GUI based and Text based.

GUI based editors only work on GUI based systems.

Text based editors work on both GUI and CLI systems.

Text Editors

Learning a text based editor is useful. You will always be able to edit files whether you are at a text based Terminal or a GUI based Desktop. Sometimes you will be logged into a system that doesn't offer the GUI and you will need to know a text-based editor.

Anytime you learn a new text editor there are a few basic things you should know how to do.

- Open a file
- Edit a file
- Save a file
- Exit the program

Text Editors - Nano

- Nano
 - Nano comes pre-installed with Linux.
 - It is a basic text editor.
 - $\circ\,$ This is probably the easiest editor to learn.
 - $\circ\,$ The most common shortcuts are listed at the bottom of the editor screen.
 - Open a file: nano sauce.txt
 - Edit a file: There is nothing special. Just start typing.
 - Save a file(aka Write Out): ctrl-o
 - Exit the program: ctrl-x

Text Editors - VIM

- VI / VIM
 - VI comes pre-installed with most Linux distributions.
 - $\circ~$ VI and the enhanced version VIM are a text based editor.
 - VIM is also available in a GUI version as an add on program.
 - It is mode based. It has 3 main modes normal mode , insert mode and visual mode.
 - It uses commands to navigate and simplify the text editing experience instead of a mouse and buttons to click.
 - $\circ\,$ This is the editor you will learn in this class.

Text Editors - VIM commands

```
* Open a file: `vi sauce.txt`
```

```
* Edit a file: type `i` to enter insert mode. Start typing.
```

- * Use commands: type `esc` to return to normal mode.
- * Save a file: `:w`
- * Exit the program: `:q`

Text Editors - Emacs

- Emacs
 - Emacs does not come pre-installed with Linux.
 - It is a very popular and very powerful editor.
 - It uses shortcuts to navigate and simplify the text editing experience.
 - It comes in both Text based and GUI based versions.

Text Editors - Emacs commands

```
* Open a file: `emacs sauce.txt`
* Edit a file: Again, nothing special. Just start typing.
```

```
* Save a file: `Ctrl-x, Ctrl-s`
```

- * Exit the program: `Ctrl-x, Ctrl-c`
- * Cancel a half completed Shortcut: `Ctrl-g`

```
* Undo: `Ctrl-x, u`
```

Text Editors - Gedit

- Gedit
 - Gedit is a GUI based editor that comes pre-installed with your GUI installation.
 - It can only run on a GUI based version of Linux.

Editor notes

Editing a file is the same command format no matter which editor you choose. And any text editor can open and edit any text document created by another editor.

editor-name filename

- vi testing.txt
- vim testing.txt
- gvim testing.txt
- nano testing.txt
- emacs testing.txt
- gedit testing.txt

Editor notes

Opening a file with a text editor will automatically create the file if it doesn't already exist. This is very helpful when you want to create a new file, but can be troublesome if you are trying to edit an existing file and have a typo in the name or an incorrect path. Linux can't tell the difference.

If you open a file for editing and expect to find text inside of it but see a blank file instead - first thing to do is close the file and check the spelling and path of the file you are trying to edit. If you don't know the correct path - try using the find command.

Optional Reading

The following resources are optional if you want to learn more

- vimtutor (It's the built in Linux tutorial. Type the command to begin)
- <u>vim-adventures.com</u>
- <u>Vi/Vim Reference Card Front</u>
- <u>Vi/Vim Reference Card Back</u>

Optional Reading (More)

- Emacs Tutorial
- <u>Emacs Manual</u>
- Emacs Reference Card
- <u>Gedit Homepage</u>
- <u>Nano Basics</u>

Textbook Time

- There will be no textbook reading for this section.
- Go to the <u>openvim.com</u> website and complete the tutorial.