Working with Text Files



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Overview



UNIX is text oriented

- System administration
- Log files
- Software configuration

List file contents

Edit text files

Filenames

- Limitations and best practices
- Quoting special characters



Editing Text Files



Listing Text Files

cat

- Best for small files
- No paging
- May mess up your terminal
- Use "reset" to fix terminal

less

- Pager with lots of features
- See "man less"
- Space moves 1 page down
- "b" moves 1 key up
- Exit with "<u>q"</u>



Editing Text Files

Nano

- Small, easy to use
- On almost any system
- Shows commands on screen

Vi

- Fast and powerful
- Installed everywhere
- Insert mode: i
- Command mode: Esc
- Save: :w
- Exit: :q
- Exit without save: :q!

Editing Text Files

Emacs

- Menu: F10
- Exit Ctrl-x, Ctrl-c

Tip: learn how to use Emacs or Vi

- Increase your productivity



Opening Other Files

On Mac Os

```
# Open program associated w. this file
# Html file: browser
open index.html
# Current folder in Finder
open .
# Picture: Preview
open -a Preview picture.jpg
```

On Linux

```
# No default "open" command
# Best guess
xdg-open index.html

# Call the correct program directly
firefox index.html
gimp picture.jpg
```

Creating Files

```
# Create one or more empty files
# On existing file: update timestamp
touch somefile
touch file1 file2 file3
# Create and edit a new file (if it does not exist yet)
nano new_file.txt
```

Creating Folders

```
# Create one or more folders
mkdir ~/notes
mkdir ~/notes ~/diary
```



More about Filenames



Filenames and Characters



Filenames can contain just about anything

- Except /
- Hidden files start with a dot



```
cd My Documents # Error: No such file
cd 'My Documents'
cd My\ Documents
```

Handling special characters

Single quotes

Backslash escapes a single character

Double quotes (don't use for now)



Case Sensitivity, Extensions



Case sensitivity

- "hello" vs "Hello"
- Linux filenames are case sensitive
- Mac OS filenames are not
- But those are *defaults*; depends on system configuration

Extensions (.exe, .zip) are optional

- "file" command shows file type



Best Practices



Use letters, numbers, dots, - and _

Want to be really safe? Only use lowercase

Be careful with spaces

- Especially trailing spaces

Characters to Avoid

```
Quotes: ` ' "
Brackets, parens: {} () < > [ ]
Interpunction: ! ? & | : ; \ ^
Other: $ @ ~ * #
Whitespace: tab delete backspace newline
```

Up Next: Becoming a Poweruser

