

launch _code

John Woolbright, Technical Curriculum Developer

June, 15, 2022

Userspace Applications



Note: Userspace Applications

Everything within this course is technically a userspace application. It isn't globally known that these are "userspace applications", these are just common ones we wanted to show you.

There are other tools that allow you to do these things but we wanted to cover these major categories.

Everything you learn in this course is userspace, we just grouped these together because they are relatively common tools. Making web requests, editing files, searching.



wget

GNU software package used to retrieve files using HTTP, HTTPS, FTP, and FTPS



wget use cases

with wget you can download a file from the uri holding that file

The download can be any format

Once downloaded you are able to manipulate the file as you see fit



curl

tool used to craft HTTP and HTTPS requests while also displaying responses

Open source software



curl use cases

Allows the user to transfer data from within your terminal or by the use of scripts

Great for testing APIs using HTTP methods GET, POST, PATCH, DELETE, and PUT requests



grep

Tool used to search content (using words and regular expressions)



grep Use Cases

Search for file names matching a specific pattern in a directory

Search contents of a file for specific patterns

Search web request data for lines matching specific patterns



Patterns

A pattern is written as a regular expression or RegEx as you may be more familiar with

This can be:

a single character

a word

an entire phrase

all of the above using the tools / syntax defined by regular expressions



sed

tool used to edit streams of data. A file can be a stream of data. We talked about streams earlier, they can be input, output, error, its just data.

We are providing some form of input and the tool will search and replace, or delete specific lines.



sed Use Cases

search and replace

add content before or after specific patterns

delete lines

add lines

Our use cases during course development: 20.04 vs 22.04, Front Matter



vim

Tool used to edit files within your terminal



vim Use Cases

Allows the user to edit files within your terminal

Create new files

Edit existing files

Read files



Why it is Useful

Vim and other similar tools are useful when working inside of a remote server

The reason being is that the remote server has no GUI

No provided text editor that you are comfortable with



Modes

Normal - mainly used for navigation

Visual - making changes to selected text

Insert - allows user to insert new characters or remove them

You may see additional modes listed inside of this curriculum but the two modes you are expected to learn and be comfortable with are Normal and Insert modes





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