

# Intro to Linux



## 1.2.3 – Metadata

# Metadata

Users will learn how data is cataloged in most Linux systems.

- Linux uses metadata to help us understand the differences between files of the same type
  - Some examples include:
    - The title, artist, and album of a song in an .mp3
    - The creation data, file size, and resolution of a photo in a .jpg
    - The GPS coordinates of a geotagged image.
    - The hashtags associated with a social media post.
    - The keywords used to describe a website.



# Metadata - Example

Picture yourself in a library looking for a book about dinosaurs, looking up and down every aisle until you finally find it.

- Instead, you could search the catalog for “dinosaurs”
- The catalog is database of information about books containing:
  - Titles
  - Authors
  - Subjects
  - And more



# Metadata - Commands

## stat

- Prints out the status of Linux files, directories, and file systems
- Includes information regarding files, directories and file systems such as their sizes, blocks, inodes, permissions, and timestamps for modification

```
ubuntu@ip-10-15-86-128:~/Desktop$ ls
README
ubuntu@ip-10-15-86-128:~/Desktop$ stat README
  File: README
  Size: 152          Blocks: 8          IO Block: 4096   regular file
Device: 10301h/66305d Inode: 608906      Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/  ubuntu)   Gid: ( 1000/  ubuntu)
Access: 2024-04-10 15:14:11.081250810 +0000
Modify: 2024-04-10 15:14:22.213271235 +0000
Change: 2024-04-10 15:14:22.213271235 +0000
 Birth: -
```



# Metadata – Commands

## File

- Determines the file type, ignoring the extension used for file
- Different extensions can be used on a file either accidentally or maliciously

```
ubuntu@ip-10-15-86-128:~/Desktop$ file README
README: ASCII text
ubuntu@ip-10-15-86-128:~/Desktop$
```

