

Filename: comptia-linuxxk0004-5-3-1-locating_files

Show Name: CompTIA Linux+ (XK0-004)

Topic: Managing Files and Directories

Episode Name: Locating Files

Description: In this episode, Zach and Don look at some of the methods that can be used to find files and commands in Linux. They highlight the find, locate, which and whereis commands and explain when each command is appropriate. They wrap up by explaining how aliases can be used to disguise commands and how they can be deciphered.

Locating Files

[?] What is your go-to method to find files?

- `find` command
- `find [path...] [expression...]`

Search by filename

```
find / -name README.txt
find / -name '*.txt' 2>/dev/null
```

[?] Can you search by something other than a file name?

Search by Permission Mode

```
find /bin -perm +rwx
find /bin -perm -rwx
```

Search by File Size

```
find /usr -size 2M
find /usr -size 2c
find /usr -size -2c
find /usr -size +20M
```

Search by Group

```
find / -group dpezet
find / -gid 1002
```

Search by User ID

```
find /home/dpezet -user dpezet
find /home/dpezet -uid 1002
```

[?] Can we limit the number of subdirectories it searches?

Restrict Search Depth

```
find / -maxdepth 6 -name README.txt
```

[?] Are there any other tools we could use to look for files?

- `locate` command
 - `locate README`
- `whereis` command
 - `$ whereis ls`
 - `whereis ifconfig`
- `which` command
 - Returns ONLY the 1st match it finds by default

- `which xterm`

[?] What if none of those commands find a file I am looking for?

- `type` command
 - Displays how a command is interpreted
 - `type cat`
 - `type ls`
 - `type -a ls`
- `grep` command
 - Searches within files
 - Uses regular expressions
 - Covered later