

Linux, and BASH Scripting

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Filesystem

Everything is a file!

The main way of interacting with the Linux filesystem is through the cli.

Navigation

- ▶ pwd: get the current working directory.
- ▶ ls: list files and directories.
- ▶ cd: to change the current working directory.

Files

File information

- ▶ file: get file type.
- ▶ stat: list file information and metadata.

File content

- ▶ cat: output contents of file.
- ▶ head: output first 10 lines of file.
- ▶ tail: output last 10 lines of file.

Shell

Alias

Names that the shell translates into commands.

```
alias ll='ls -l'
```

```
alias la='ls -a'
```

Use unalias to unset an alias while on the shell.

History

history

Shows history with numerated commands.

 (bang operator)

!!	repeats last commands
!*	last command arguments
!n	nth command in history
!n	same as !n but in reverse order

Processes

Shell Processes

A shell can execute commands in the background whether by adding a `&` after a command or by pressing `^Z`.

If using `^Z` the process will be suspended and you'll need to enter the `bg` command to continue it.

jobs

List the background processes of the shell.

fg

Bring a shell subprocess to the foreground.

bg

Resume background process of the shell.

watch

Reruns command on repeated intervals of time.

Processes

System User

useradd

Adds a new user.

-
- g set user group
 - G assign multiple groups
 - m make home directory
 - u set specific UID
 - s assign user default shell
-

userdel

Removes a user.

-
- r remove home directory
 - f force delete
-

usermod

Modifies a user properties.

-
- g set primary user group
 - G assign multiple groups
 - a append groups set by `-G`
 - d changes user home directory
 - l change name of user
 - c change full name of user
 - s change user default shell
-

Net

Configuration

ifconfig Manage interfaces, primarily ip-addresses, masks, and MACs.

show info of all interfaces

```
ifconfig -a
```

show info of interface

```
ifconfig interface
```

set ip and mask of interface

```
ifconfig interface ip netmask mask
```

set mac-address of interface

```
ifconfig interface hw class mac
```

enables interface

```
ifconfig interface up
```

disables interface

```
ifconfig interface down
```

Querying