

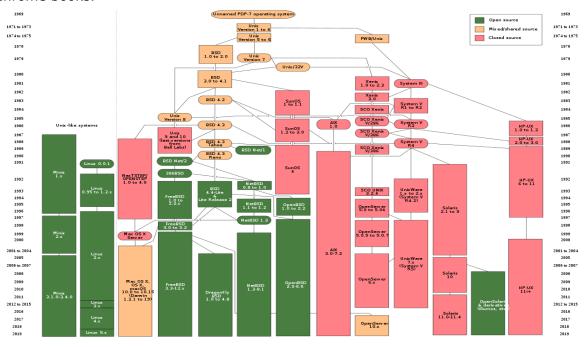


Overview

Linux is a Family of open source Unix-like operating systems. Just so this doesn't look like a foreign language, let's define some things first.

- 1. <u>Open Source</u> A program or software that is free to the public to use, copy, study and change in any way they feel.
- 2. <u>Unix</u>- A family of computer operating systems originating from AT&T's original Unix operating system.

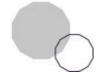
So, in Short, Linux is not only one OS. It in fact consists of many other OS's stemming from each other, all taking parts of each other in an attempt to improve on the previous version. Two such examples you may recognize is MacOS run by Apple computers or even Chrome OS run by Googles Chrome books.



What makes Linux such an important part of the Computer Science world is not only its open source nature, but its ability to work on almost any machine.

Linux systems are found on personal computers, large network or data servers, Network routers, TV's, video game consoles and even smartwatches, making Linux the most versatile OS there is.

Part 1- Introduction





Now that you have a background knowledge of what Linux is, now it's time to learn how it looks and how to use it!

Some Linux systems to contain graphical elements that make it more like a conventional Windows computer, however many Linux systems are mainly Command line based, meaning that to navigate the system you have to type in commands.

To demonstrate this today we are going to use a website developed by students at MIT called Terminus.

https://web.mit.edu/mprat/Public/web/Terminus/Web/main.html

```
Welcome! If you are new to the game, here are some tips:

Look at your surroundings with the command "ls".

Move to a new location with the command "cd LOCATION"

You can backtrack with the command "cd ..".

Interact with things in the world with the command "less ITEM"

If you forget where you are, type "pwd"

Go ahead, explore. We hope you enjoy what you find. Do ls as your first command.

>|
```

Above is a picture of what terminus looks like and what many Linux systems used also look like. In order to use the system and view files or run programs, Linux has a wide variety of commands.

Part 2- Commands

Now that you have a background knowledge of what Linux is, now its time to learn how it looks and how to use it!





Is - (Short for List) Shows the objects and locations around you. (Use after moving to any new location)

cd "Location name" - use to move to a new location after using Is
(use "cd .." to go to the previous area)

less "Item name" - used to interact with items in the world (boxes, signs etc...)

pwd - use if you ever forget where you are to see your location

Above is a small list of the main commands you will learn today. In a real Linux system, these commands are used to traverse various Directories (Folders) and view or manipulate files. In today's activity however, these files are going to be considered Locations (Directories) and objects or items (files). You will use these commands to travel throughout the terminus world and interact with it!

Part 3- The Fun Part

Now that you have a background knowledge of what Linux is, now its time to learn how it looks and how to use it!

Now that you have your commands ready let's start!

- 1. Navigate to the MIT Terminus website
- https://web.mit.edu/mprat/Public/web/Terminus/Web/main.html
- 2. To begin read the instructions and follow the first few examples below

Example 1- Looking at your surroundings

One important thing to remember is that in Linux, when you move locations, in order to know what's around you, you have to "Look around"

Use the command "Is" to list the locations and objects available to you





```
>1s
Locations:
WesternForest
NorthernMeadow
MIT
Items:
WelcomeLetter
>■
```

Example 2- Moving Around

Once you have used Is to know what locations are around you, its time to move! To move to a location use "cd LOCATIONNAME"

```
>cd NorthernMeadow
You have moved to NorthernMeadow. This is a beautiful green meadow. A plump but majestic pony prances happily about.
>
```

Remember now from the previous example to always look around once you are at a new location!

```
>cd NorthernMeadow
You have moved to NorthernMeadow. This is a beautiful green meadow. A plump but majestic pony prances happily about.
>ls
Locations:
EasternMountains
Items:
Pony
>
```

Example 3- Interacting with items, objects and people

Once you've looked around, now you can interact with the items or people you can see around you! To interact with something use "less ITEMNAME"

```
Items:
Pony
>less Pony
You go up to the pony and attempt to ride it. It compiles and you ride the pony around in circles for a bit. It then grows tired of having you as knocks you off. He then looks towards the east as if suggesting that you head in that direction.
>
```

Example 4- Returning to a previous location

If you ever want to return to a place you just came from use the command "cd .."





```
>cd ..
You have moved to Home. You are in the comfort of your own home.
>
```

Don't forget to look around!

```
>cd ..
You have moved to Home. You are in the comfort of your own home.
>ls
Locations:
WesternForest
NorthernMeadow
MIT
Items:
WelcomeLetter
>
```

Part 4- Explore

Now that you know what Linux is and how to use some commands, begin exploring and playing the game!

The more you look around and explore, the better chance you have of finding new commands to use!

If you ever get stuck remember to look back at the examples or raise your hand to ask an instructor! Have fun!

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Additional Resources

Handout for students

- Is (Short for List) Shows the objects and locations around you.
 (Use after moving to any new location)
- cd "Location name" use to move to a new location after using Is
 (use "cd .." to go to the previous area)
- less "Item name" used to interact with items in the world (boxes, signs etc..)
- pwd use if you ever forget where you are to see your location
- Is (Short for List) Shows the objects and locations around you.
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