ME4140 - ROS Workshop

Mechanical Engineering

Tennessee Technological University

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Module 2 - Linux Basics

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- What is Linux?

- A Brief History

- Keyboard Shortcuts

- The Terminal

- Tutorial 2 - Install ROS Melodic

What is Linux?

- *Just like Windows, iOS, and Mac OS, Linux is an operating system. In fact, one of the most popular platforms on the planet, Android, is powered by the Linux operating system. An operating system is software that manages all of the hardware resources associated with your desktop or laptop. To put it simply, the operating system manages the communication between your software and your hardware. Without the operating system (OS), the software wouldn?t function. -* LINUX.COM

What is Linux?

Ubuntu is a distribution of Linux. But there are many others.

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A Brief History

Once upon a time in California ...

- Unix was developed at Bell Labs (AT&T)
- Linus Torvalds
- read the whole story here or here

Keyboard Shortcuts

Press ⊞ and type *Keyboard Shortcuts* to list shortcuts in Ubuntu.

Function	Shortcut
Launcher	⊞
New Terminal	Ctrl + Alt +T
Abort Process	
Switch Windows	
Close Window	
Rename	
New Folder	

What is Linux?
A Brief History
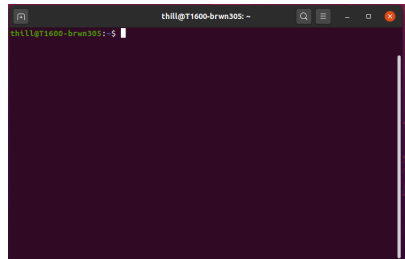Keyboard Shortcuts

Tutorial 2 - Install ROS Melodic

The Terminal

The *Terminal* is a text based interface to the computer.

Press CTRLKey+ Alt +T to open a new terminal.

Function	Command
Change Directory	cd
List Directory	ls
Copy File	cp
Remove File	rm
Abort Process	Ctrl + C
Clear Terminal	Ctrl + L

Tutorial 2 - Install ROS Melodic

- **Overview:** ROS runs on Linux! Now that Ubuntu is setup you need to install ROS.

- **Assignment:** Complete the tutorial in the document *tutorial2_install_ros.pdf* on ilearn. Your new system must have ROS Melodic installed.

- **Deliverable:** Write a one to two paragraph summary of what you accomplished and what you struggled with the most. Include an image of a terminal after the *roscore* command.

- **Next Week:** After completion of Module 2, you will be ready to start using ROS. You will begin with a simple turtle robot simulator.