## CAI3034N Autonomous Mobile

## Step 1: Download the ROS Kinetic TB3.

https://drive.google.com/file/d/1BgCh\_pG2gjC3HGIUUAiVIAClOO78\_lCP/view?usp=drive link

## Step 2:

If your computer does not have VirtualBox installed, please download it from https://www.virtualbox.org/

Step 3: In the VirtualBox, Select File and Import Appliance... File Machine Help Preferences... Ctrl+G Import Appliance... Ctrl+I R Export Appliance... Ctrl+E Welcome to VirtualBox! Virtual Media Manager... Ctrl+D The left part of this window lists all virtual machines and virtual machine groups on your Host Network Manager... Ctrl+W The right part of this window represents a set of tools which are currently opened (or can be opened) for the currently chosen machine. For a list of currently available tools check the corresponding menu at the right side of the main tool bar located at the top of the window. This list will be extended with new tools in future releases. Network Operations Manager... Check for Updates... Reset All Warnings You can press the  ${\bf F1}$  key to get instant help, or visit  $\underline{www.virtualbox.org}$  for more information and latest news. V Exit Ctrl+Q Tool to observe virtual machine (VM) details. Reflects groups of <u>properties</u> for the currently chosen VM and allows basic operations on certain properties (like the machine storage devices). Tool to control virtual machine (VM) snapshots. Reflects <u>snapshots</u> created for the currently selected VM and allows snapshot operations like <u>create</u>, <u>remove</u>, <u>restore</u> (make current) and observe their properties. Allows to <u>edit</u> snapshot attributes like <u>name</u> and <u>description</u>.

Step 4: Import "ROS Kinetic TB3.ova" and click Next 9 X ( Import Virtual Appliance Appliance to import  $\label{thm:continuity} \begin{tabular}{ll} VirtualBox currently supports importing appliances saved in the Open Virtualization Format (OVF). To continue, select the file to import below. \end{tabular}$ C:\Turtlebot3\_Workshop\ROS and VM Setup\ROS\_Kinetic\_TB3.ova Expert Mode Cancel

Step 5: Uncheck USB Controller and Network Adapter and click Import.

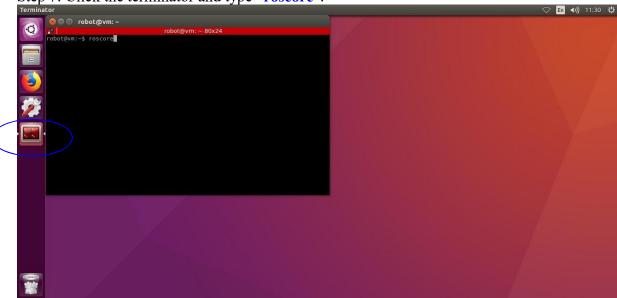
(This older version of VirtualBox may cause problem with USB Controller and Network Adapter turned on. However, we are not going to use these features. The latest version of VirtualBox may solve this problem.)



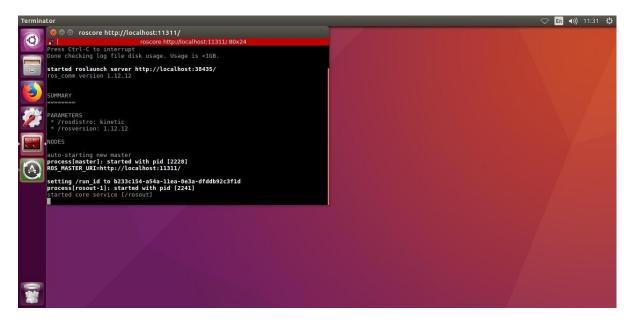
Step 6: It may take you few minutes to import the ova file. After import, double click ROS Kinetic TB3 or click Show to run it.



Step 7: Click the terminator and type "roscore".



Step 8: Make sure the **roscore** run smoothly without error as follows,



You can stop the **roscore** by pressing Ctrl + C and exit the ROS.

We will be using ROS in Week 2. If you have any problem running the software, please contact me immediately. My email is <a href="mailto:ooiws14@gmail.com">ooiws14@gmail.com</a> and contact number 0124282345. Thank you.