

Installation of Ubuntu / ROS Kinetic on VirtualBox

Download Ubuntu 16.04 from:

<https://releases.ubuntu.com/16.04.7/ubuntu-16.04.7-desktop-amd64.iso>

Download VirtualBox from :

<https://www.virtualbox.org/>

Install VirtualBox and run.

Machine, new.

Name: Ubuntu

Memory 2048Mb

Create a virtual hard disk now

VDI

Dynamically allocated

50Gb

Right click on ubuntu vm and click settings

System, Processor, select as many processors as it will allow

Storage, click on the empty DVD then under attributes click on the down arrow on the DVD and select "choose a disk file". Browse to the Ubuntu ISO file you downloaded earlier.

Make sure Network is enabled and attached to NAT

Click OK

Double click the Ubuntu VM to start it.

If it asks to select a start up disk select Ubuntu 16.04.7 and click start

When the Ubuntu DVD loads click Install Ubuntu

Click the Download updates box and click continue

Select Erase disk and install Ubuntu, Install now

Select continue

Select London as location and continue

Select English(UK) and continue

Enter a name and password and continue

When installation is complete click Restart now

Press enter

Log in to Ubuntu

Right click on the desktop and select Open Terminal

In the terminal window type the following:

```
sudo apt update
```

```
sudo apt upgrade
```

```
sudo sh -c 'echo "deb http://packages.ros.org/ros/ubuntu $(lsb_release -sc) main" > /etc/apt/sources.list.d/ros-latest.list'
```

(the above statement is all one line with a space after the >)

```
sudo apt install curl
```

```
curl -s https://raw.githubusercontent.com/ros/rosdistro/master/ros.asc | sudo apt-key add -
```

```
sudo apt update
```

```
sudo apt install ros-kinetic-desktop-full
```

```
echo "source /opt/ros/kinetic/setup.bash">> ~/.bashrc
```

```
source ~/.bashrc
```

```
sudo apt install python-rosdep python-rosinstall python-rosinstall-generator python-wstool  
build-essential
```

```
sudo rosdep init
```

```
rosdep update
```