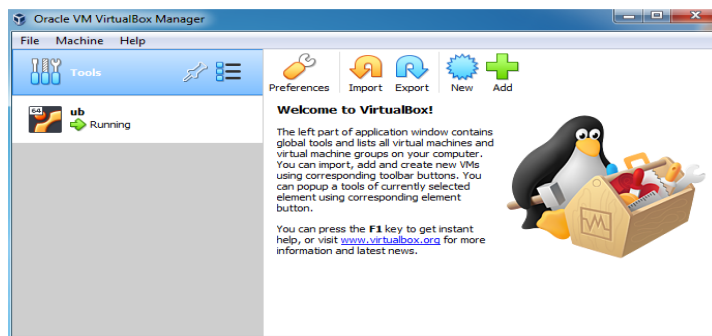


ROBPOT OPERATING SYSTEM INSTALLATION

(ROS)

Requirements :

1-Instaled and running Ubuntu 12.04.



2-connected to internet.

3-you know how to work with Ubuntu.

INSTALLATION

We will use a terminal window to write a commands

1- The first command `sudo apt update` and `sudo apt upgrade`

```
zakiya@zakiya-VirtualBox:~$ sudo apt update
[sudo] password for zakiya:
Get:1 http://security.ubuntu.com/ubuntu focal-security InRelease [91.2 kB]
Hit:2 http://se.archive.ubuntu.com/ubuntu focal InRelease [91.2 kB]
Hit:3 http://se.archive.ubuntu.com/ubuntu focal-updates InRelease [91.2 kB]
Hit:4 http://se.archive.ubuntu.com/ubuntu focal-backports InRelease [91.2 kB]
Get:5 http://se.archive.ubuntu.com/ubuntu focal/main amd64 Packages [91.2 kB]
Get:6 http://security.ubuntu.com/ubuntu focal-security amd64 Packages [91.2 kB]
Get:7 http://se.archive.ubuntu.com/ubuntu focal/main i386 Packages [91.2 kB]
Get:8 http://security.ubuntu.com/ubuntu focal-security i386 Packages [91.2 kB]
```

```

not packages are up to date.
zakiya@zakiya-VirtualBox:~$ sudo apt upgrade
Reading package lists... Done
Building dependency tree
Reading state information... Done
Calculating upgrade... Done
The following package was automatically installed and is no longer required:
  libllvm9
Use 'sudo apt autoremove' to remove it.
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
zakiya@zakiya-VirtualBox:~$ sudo sh -c 'echo "deb http://packages.ubuntu.com $(lsb_release -sc) main" > /etc/apt/sources.list.d/ros-late

```

2- the second command downloads the ros file .

```

zakiya@zakiya-VirtualBox:~$ sudo apt-get install ros-kinetic-desktop-full
Reading package lists... Done
Building dependency tree
Reading state information... Done

```

3-Initialize rosdep by write commands sudo rosdep init ,
rosdep update

```

zakiya@zakiya-VirtualBox:~$ sudo rosdep init
ERROR: default sources list file already exists

zakiya@zakiya-VirtualBox:~$ rosdep update
reading in sources list data from /etc/ros/rosdep/sources.list.d
Hit https://raw.githubusercontent.com/ros/rosdistro/master/rosdep/
aml
Hit https://raw.githubusercontent.com/ros/rosdistro/master/rosdep/
Hit https://raw.githubusercontent.com/ros/rosdistro/master/rosdep/
Hit https://raw.githubusercontent.com/ros/rosdistro/master/rosdep/
Hit https://raw.githubusercontent.com/ros/rosdistro/master/release
Query rosdistro index https://raw.githubusercontent.com/ros/rosdis
ex-v4.yaml
Skip end-of-life distro "ardent"

```

4-Environment setup

Open file then add the line echo "source
/opt/ros/hydro/setup.bash".

Getting rosinstall

Sudo apt-get install python-rosinstall.