









## تثبيت نظام روز على نظام تشغيل اوبنتو

### installing ROS Noetic on last Ubuntu 20.04 OS

بعد تثبيت نظام تشغيل اوبنتو 20.04 سواء على virtualbox او كنظام أساسي نتوجه لتثبيت آخر إصدار من نظام ROS وهو Noetic المتوافق مع الإصدار الأخير من اوبنتو

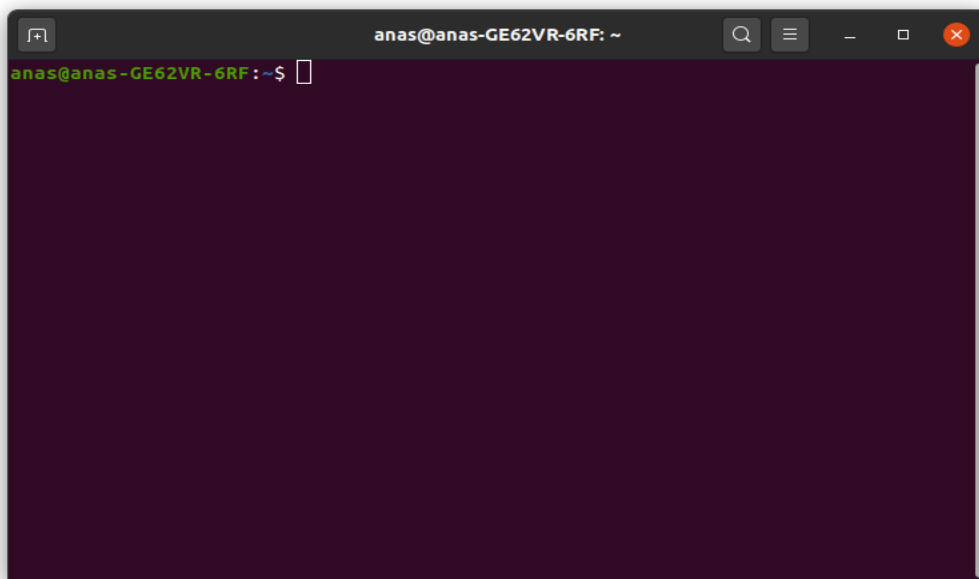
### 3. List of Distributions

Distro	Release date	Poster	Tuturtle, turtle in tutorial	EOL date
ROS Noetic Ninjemys (Recommended)	May 23rd, 2020			May, 2025 (Focal EOL)
ROS Melodic Morenia	May 23rd, 2018			May, 2023 (Bionic EOL)
ROS Lunar Loggerhead	May 23rd, 2017			May, 2019
ROS Kinetic Kame	May 23rd, 2016			April, 2021 (Xenial EOL)

Launch terminal

Ctrl+Alt+T

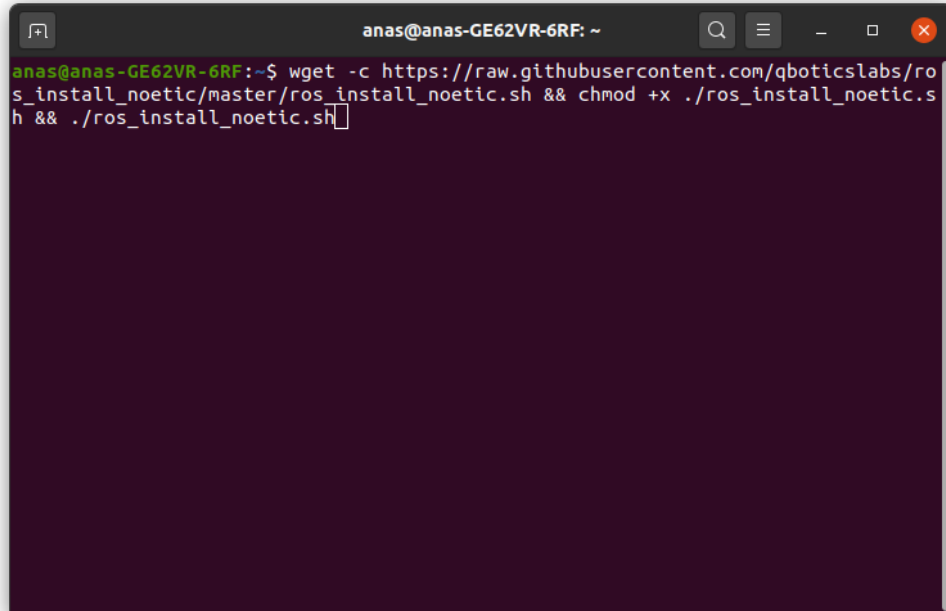
1. نقوم بفتح الترمينال terminal



Smart Methods  
Anas Bawazir

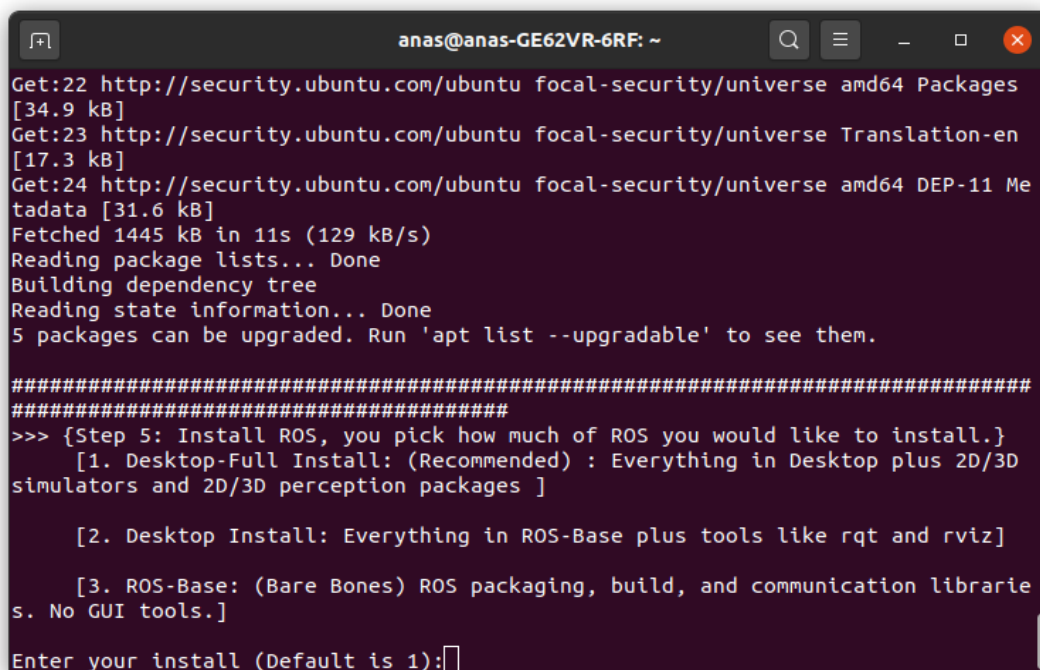
3. ننسخ الكود التالي ونلصقه فيه ونضغط enter سيطلب منا كلمة مرور الحساب ندخلها لكنها لا تظهر ونضغط enter

```
wget -c https://raw.githubusercontent.com/qboticslabs/ros_install_noetic/master/ros_install_noetic.sh && chmod +x ./ros_install_noetic.sh && ./ros_install_noetic.sh
```



```
anas@anas-GE62VR-6RF: ~  
anas@anas-GE62VR-6RF:~$ wget -c https://raw.githubusercontent.com/qboticslabs/ros_install_noetic/master/ros_install_noetic.sh && chmod +x ./ros_install_noetic.sh && ./ros_install_noetic.sh
```

4. ننتظر بعض الوقت حتى يصل لهذه المرحلة ونختار 1 ونضغط enter وننتظر حتى ينتهي \* تثبيت desktop-full بكامل الخصائص مستحسن



```
anas@anas-GE62VR-6RF: ~  
Get:22 http://security.ubuntu.com/ubuntu focal-security/universe amd64 Packages [34.9 kB]  
Get:23 http://security.ubuntu.com/ubuntu focal-security/universe Translation-en [17.3 kB]  
Get:24 http://security.ubuntu.com/ubuntu focal-security/universe amd64 DEP-11 Metadata [31.6 kB]  
Fetched 1445 kB in 11s (129 kB/s)  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
5 packages can be upgraded. Run 'apt list --upgradable' to see them.  
  
#####  
>>> {Step 5: Install ROS, you pick how much of ROS you would like to install.}  
[1. Desktop-Full Install: (Recommended) : Everything in Desktop plus 2D/3D simulators and 2D/3D perception packages ]  
  
[2. Desktop Install: Everything in ROS-Base plus tools like rqt and rviz]  
  
[3. ROS-Base: (Bare Bones) ROS packaging, build, and communication libraries. No GUI tools.]  
Enter your install (Default is 1):
```

[Smart Methods](#)  
[Anas Bawazir](#)

5. بعد انتهاء التثبيت نقوم باستعراض نسخة ROS لكي نتأكد من أن التثبيت تم بنجاح عن طريق كتابه الكود `rosversion -d` في الترمينال

```
anas@anas-GE62VR-6RF: ~  
Setting up ros-noetic-rqt-common-plugins (0.4.9-1focal.20200529.065759) ...  
Setting up ros-noetic-perception (1.5.0-1focal.20200529.073204) ...  
Setting up ros-noetic-viz (1.5.0-1focal.20200602.151318) ...  
Setting up ros-noetic-desktop (1.5.0-1focal.20200602.151713) ...  
Setting up ros-noetic-simulators (1.5.0-1focal.20200602.151315) ...  
Setting up ros-noetic-desktop-full (1.5.0-1focal.20200602.152246) ...  
Processing triggers for libc-bin (2.31-0ubuntu9) ...  
  
#####  
>>> {Step 6: Setting ROS Environment, This will add ROS environment to .bashrc.}  
>>> { After adding this, you can able to access ROS commands in terminal}  
  
#####  
>>> {Step 7: Testing ROS installation, checking ROS version.}  
  
>>> {Type [ rosversion -d ] to get the current ROS installed version}  
  
#####  
anas@anas-GE62VR-6RF:~$
```

```
anas@anas-GE62VR-6RF:~$ rosversion -d  
noetic  
anas@anas-GE62VR-6RF:~$
```

6. هكذا انتهى التثبيت , كان مختصر وكل الشكر لموقع [robocademy.com](http://robocademy.com) انظر المراجع للاستزادة

## المراجع

1. <http://wiki.ros.org/Distributions>

2. <https://robocademy.com/2020/05/23/getting-started-with-new-ros-noetic-ninjemys/>