

ROS+Gazebo+PX4 Installation

blogpost-style

aayushi #1 October 7, 2021, 10:36am



Environment Setup

Follow the following steps to install ROS1, Gazebo and PX4 Firmware, that collectively form the whole environment.

1. General Dependencies

To use all provided utilities, there are some packages we need to install first, you can copy these commands as it is, but it is recommended to learn and understand what each command and software does:

```
sudo apt install -y \  
    ninja-build \  
    exiftool \  
    python3-empy \  
    python3-toml \  
    python3-numpy \  
    python3-yaml \  
    python3-dev \  
    python3-pip \  
    ninja-build \  
    protobuf-compiler \  
    libeigen3-dev \  
    genromfs
```

```
pip install \  
    pandas \  
    jinja2 \  
    pyserial \  

```

```
cerberus \  
pyulog \  
numpy \  
toml \  
pyquaternion
```

2. ROS-Neotic Installation

Step 1. Configure your Ubuntu repositories

Configure your Ubuntu repositories to allow “restricted,” “universe,” and “multiverse.” You can [follow the Ubuntu guide](#) for instructions on doing this.

Step 2. Setup your sources.list

Setup your computer to accept software from packages.ros.org.

```
sudo sh -c 'echo "deb http://packages.ros.org/ros/ubuntu $(lsb_release
```



Step 3. Set up your keys

```
sudo apt install curl # if you haven't already installed curl  
curl -s https://raw.githubusercontent.com/ros/rosdistro/master/ros.asc
```



Step 4. Installation

```
sudo apt update  
sudo apt install ros-noetic-desktop-full
```

Step 5. Environment Setup

```
source /opt/ros/noetic/setup.bash
```

It can be convenient to automatically source this script every time a new shell is launched. These commands will do that for you.

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

Step 6. Dependencies for building packages

```
sudo apt install python3-rosdep python3-rosinstall python3-rosinstall-g  
sudo apt install python3-rosdep  
sudo rosdep init  
rosdep update
```



3. MAVROS Installation

MAVROS is a communication node based on MAVLink for ROS that is specially designed for communication between the drone and the companion computer. To install it, follow the following instructions:

```
sudo apt install python3-catkin-tools python3-rosinstall-generator python3-catkin-tools
```

Step 1. Create the workspace:

```
mkdir -p ~/catkin_ws/src
cd ~/catkin_ws
catkin init
wstool init src
```

Step 2. Install MAVLink: we use the Kinetic reference for all ROS distros as it's not distro-specific and up to date

```
rosinstall_generator --rostdistro kinetic mavlink | tee /tmp/mavros.rosinstall
```

Step 3. Install MAVROS: get source (upstream - released)

```
rosinstall_generator --upstream mavros | tee -a /tmp/mavros.rosinstall
```

alternative

```
rosinstall_generator --upstream-development mavros | tee -a /tmp/mavros.rosinstall
```

Step 4. Create workspace & deps

```
wstool merge -t src /tmp/mavros.rosinstall
wstool update -t src -j4
rosdep install --from-paths src --ignore-src -y
```

Step 5. Install GeographicLib datasets:

```
./src/mavros/mavros/scripts/install_geographiclib_datasets.sh
```

Step 6. Build source

```
catkin build
```

Step 7. Make sure that you use setup.bash

```
source devel/setup.bash
```

4. PX4 Firmware Installation

```
cd ~/catkin_ws/src
git clone https://github.com/PX4/PX4-Autopilot.git --recursive
cd PX4-Autopilot/
make px4_sitl_default gazebo
```

Now you should see a window pop out (Figure 1) and a drone is centered in the middle of the environment.

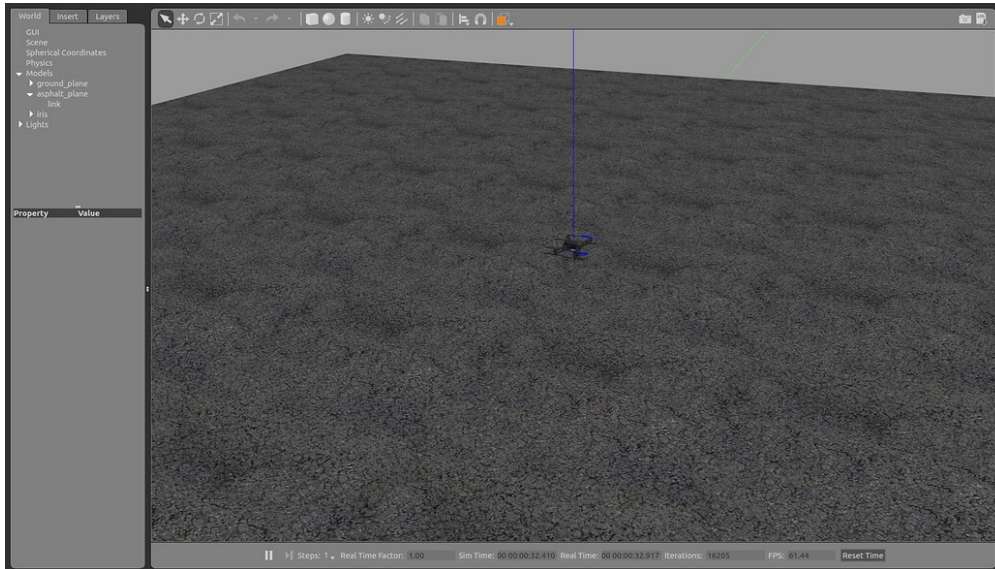


Figure 1: Gazebo environment

Modifying your 'bashrc' so that your environment remains the same every time you open a new terminal:

```
source ~/catkin_ws/devel/setup.bash
source ~/catkin_ws/src/PX4-Autopilot/Tools/setup_gazebo.bash ~/catkin_ws
export ROS_PACKAGE_PATH=$ROS_PACKAGE_PATH:~/catkin_ws/src/PX4-Autopilot
export ROS_PACKAGE_PATH=$ROS_PACKAGE_PATH:~/catkin_ws/src/PX4-Autopilot/
```



3 Likes

Task 0: Instructions

Facing a problem in Task 0

mani13jha1999 #2 October 9, 2021, 3:54am

Hello,

I am facing an error related to this command → `make px4_sitl_default gazebo`

18 Likes

Kazip #3 October 9, 2021, 4:39am

When I run the last command, I get the underlying error. What's the solution for that error?

```
~/catkin_ws/src/PX4-Autopilot$ make px4_sitl_default gazebo
```

```
[0/6] Performing configure step for 'sitl_gazebo'
```

```
– install-prefix: /usr/local
– cmake build type: RelWithDebInfo
– Using C++17 standard
– Found Boost: /usr/lib/x86_64-linux-gnu/cmake/Boost-1.71.0/BoostConfig.cmake (found suitable version
“1.71.0”, minimum required is “1.58”) found components: system thread filesystem
– Found DART: /usr/include (Required is at least version “6.6”) found components: dart
– Found Boost: /usr/lib/x86_64-linux-gnu/cmake/Boost-1.71.0/BoostConfig.cmake (found suitable version
“1.71.0”, minimum required is “1.40.0”) found components: thread system filesystem program_options
regex iostreams date_time
– Found Protobuf: /usr/lib/x86_64-linux-gnu/libprotobuf.so;-lpthread (found version “3.6.1”)
– Looking for ignition-math6 – found version 6.8.0
– Searching for dependencies of ignition-math6
– Looking for OGRE...
– Found Ogre Ghadamon (1.9.0)
– Looking for OGRE_Paging...
– Found OGRE_Paging: optimized;/usr/lib/x86_64-linux-gnu/libOgrePaging.so;debug;/usr/lib/x86_64-
linux-gnu/libOgrePaging.so
– Looking for OGRE_Terrain...
– Found OGRE_Terrain: optimized;/usr/lib/x86_64-linux-gnu/libOgreTerrain.so;debug;/usr/lib/x86_64-
linux-gnu/libOgreTerrain.so
– Looking for OGRE_Property...
– Found OGRE_Property: optimized;/usr/lib/x86_64-linux-gnu/libOgreProperty.so;debug;/usr/lib/x86_64-
linux-gnu/libOgreProperty.so
– Looking for OGRE_RTShaderSystem...
– Found OGRE_RTShaderSystem: optimized;/usr/lib/x86_64-linux-
gnu/libOgreRTShaderSystem.so;debug;/usr/lib/x86_64-linux-gnu/libOgreRTShaderSystem.so
– Looking for OGRE_Volume...
– Found OGRE_Volume: optimized;/usr/lib/x86_64-linux-gnu/libOgreVolume.so;debug;/usr/lib/x86_64-
linux-gnu/libOgreVolume.so
– Looking for OGRE_Overlay...
– Found OGRE_Overlay: optimized;/usr/lib/x86_64-linux-gnu/libOgreOverlay.so;debug;/usr/lib/x86_64-
linux-gnu/libOgreOverlay.so
– Looking for ignition-math6 – found version 6.8.0
– Looking for ignition-transport8 – found version 8.2.0
– Searching for dependencies of ignition-transport8
– Found Protobuf: /usr/lib/x86_64-linux-gnu/libprotobuf.so;-lpthread (found suitable version “3.6.1”,
minimum required is “3”)
– Config-file not installed for ZeroMQ – checking for pkg-config
– Checking for module ‘libzmq >= 4’
– Found libzmq , version 4.3.2
– Checking for module ‘uuid’
– Found uuid, version 2.34.0
```

- Looking for ignition-msgs5 – found version 5.8.0
- Searching for dependencies of ignition-msgs5
- Looking for ignition-math6 – found version 6.8.0
- Checking for module ‘tinyxml2’
- Found tinyxml2, version 6.2.0
- Looking for ignition-msgs5 – found version 5.8.0
- Looking for ignition-common3 – found version 3.13.2
- Searching for dependencies of ignition-common3
- Looking for dlfcn.h - found
- Looking for libdl - found
- Searching for component [graphics]

CMake Error at /usr/share/cmake-3.16/Modules/CMakeFindDependencyMacro.cmake:47 (find_package):
Could not find a configuration file for package “ignition-common3-graphics”
that exactly matches requested version “3.13.2”.

The following configuration files were considered but not accepted:

```
/usr/lib/x86_64-linux-gnu/cmake/ignition-common3-graphics/ignition-comm
/usr/lib/x86_64-linux-gnu/cmake/ignition-common3-graphics/ignition-common3-graphics
```

Call Stack (most recent call first):

/usr/lib/x86_64-linux-gnu/cmake/ignition-common3/ignition-common3-config.cmake:203

(find_dependency)

/usr/lib/x86_64-linux-gnu/cmake/gazebo/gazebo-config.cmake:250 (find_package)

CMakeLists.txt:48 (find_package)

– Configuring incomplete, errors occurred!

See also “/home/kazip/catkin_ws/src/PX4-

Autopilot/build/px4_sitl_default/build_gazebo/CMakeFiles/CMakeOutput.log”.

See also “/home/kazip/catkin_ws/src/PX4-

Autopilot/build/px4_sitl_default/build_gazebo/CMakeFiles/CMakeError.log”.

[1/6] Generating .../.../logs

FAILED: external/Stamp/sitl_gazebo/sitl_gazebo-configure

cd /home/kazip/catkin_ws/src/PX4-Autopilot/build/px4_sitl_default/build_gazebo && /usr/bin/cmake -

DCMAKE_INSTALL_PREFIX=/usr/local -DSEND_ODOMETRY_DATA=ON -

DGENERATE_ROS_MODELS=ON -GNinja /home/kazip/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo

&& /usr/bin/cmake -E touch /home/kazip/catkin_ws/src/PX4-

Autopilot/build/px4_sitl_default/external/Stamp/sitl_gazebo/sitl_gazebo-configure

ninja: build stopped: subcommand failed.

make: *** [Makefile:225: px4_sitl_default] Error 1

8 Likes

sudeshgowdaj #4 October 9, 2021, 5:30am

I had the same issue. I referred here and solved the issue <https://github.com/PX4/PX4-Autopilot/issues/16386>

6 Likes

balaniaf #5 October 9, 2021, 7:32am

Dear Team...!

Greetings...!

Thank you very much! for giving us an environment to work with the latest technologies.

Very interesting to read, learn about the trending software installation procedures.

Have a great time...!

1 Like

mani13jha1999 #6 October 9, 2021, 8:49am

Can you point out which person's solution worked for you.

sudeshgowdaj #7 October 9, 2021, 8:52am

I ran this command and the error didn't show up

```
sudo apt install libignition-rendering3
```

5 Likes

Kazip #8 October 9, 2021, 12:40pm

```
sudo apt install libignition-rendering3
```

It worked for me too

1 Like

mani13jha1999 #9 October 9, 2021, 2:02pm

Even after running this command. It's still showing the same error

1 Like

anish.natekar.20031 #11 October 9, 2021, 4:27pm

The error is coming from a file named Makefile and at line number 255 (below i have given a code snippet of the block starting from line 255) can someone make sense of this and point out the error?

```
px4fmu_firmware:
check_px4_io-v2_default
check_px4_fmu-v2_default
check_px4_fmu-v3_default
check_px4_fmu-v4_default
check_px4_fmu-v4pro_default
check_px4_fmu-v5_default
check_px4_fmu-v5x_default
sizes
```

[anish.natekar.20031](#) #12 October 9, 2021, 5:00pm

I am also getting the same error after running that command

[aayushi](#) #14 October 9, 2021, 6:41pm

Running these commands might solve your problem.

```
sudo apt-get update
sudo apt-get -y install wget lsb-release gnupg

sudo sh -c 'echo "deb http://packages.osrfoundation.org/gazebo/ubuntu-stable
wget http://packages.osrfoundation.org/gazebo.key -O - | sudo apt-key ac
sudo apt-get update
sudo apt install libignition-rendering3
```



3 Likes

[Oalpha](#) #15 October 9, 2021, 7:17pm

After running \$ sudo apt-get update command, I get an error-
The repository '[Index of /gazebo/ubuntu-stable/](#) lsb_release Release' does not have a Release file.
How do I fix this?

[aayushi](#) #16 October 9, 2021, 7:32pm

It seems like you have a wrong gazebo target.

Try this:

```
sudo sh -c 'echo "deb http://packages.osrfoundation.org/gazebo/ubuntu-st
sudo sh -c 'echo "deb http://packages.osrfoundation.org/gazebo/ubuntu-pr
wget https://packages.osrfoundation.org/gazebo.key -O - | sudo apt-key a
sudo apt-get update
```

2 Likes

Oalpha #17 October 9, 2021, 7:37pm

Works now. Thank you!

Oalpha #18 October 9, 2021, 7:44pm

aayushi:

```
sudo apt-get install libignition-rendering<#>-dev
```

While running the last command, I get a syntax error-
syntax error near unexpected token `newline'

aayushi #19 October 9, 2021, 7:45pm

there is a bug in command i guess...

try this

```
sudo apt install libignition-rendering3
```

1 Like

Oalpha #20 October 9, 2021, 7:48pm

aayushi:

```
make px4_sitl_default gazebo
```

Worked, but I still get an error after running the last command-
make px4_sitl_default gazebo

ayaan_2105 #21 October 10, 2021, 2:07am

```

linked by target "gazebo_gps_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_opticalFlow_mockup_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_inlock_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_parachute_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_lidar_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_multirotor_base_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_wind_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_opticalFlow_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_uuv_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_drop_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "nav_msgs" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_sonar_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_vision_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_user_camera_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_gst_camera_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "nav_msgs" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_controller_interface" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_inu_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_navlink_interface" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_motor_model" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_camera_manager_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_magnetometer_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_barometer_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "LiftDragPlugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo
linked by target "gazebo_catapult_plugin" in directory /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo

-- Configuring incomplete, errors occurred!
See also "/home/ayaan/catkin_ws/src/PX4-Autopilot/build/px4_sitl_default/build_gazebo/CMakeFiles/CMakeOutput.log".
See also "/home/ayaan/catkin_ws/src/PX4-Autopilot/build/px4_sitl_default/build_gazebo/CMakeFiles/CMakeError.log".
[1/6] Generating .../logs
...
cd /home/ayaan/catkin_ws/src/PX4-Autopilot/build/px4_sitl_default/build_gazebo && /usr/bin/cmake -DCMAKE_INSTALL_PREFIX=/usr/local -DSEND_ODOM
ENTRY_DATA=ON -DGENERATE_ROS_MODELS=ON -GNinja /home/ayaan/catkin_ws/src/PX4-Autopilot/Tools/sitl_gazebo && /usr/bin/cmake -E touch /home/ayaan
/catkin_ws/src/PX4-Autopilot/build/px4_sitl_default/external/Stamp/sitl_gazebo/sitl_gazebo-configure
ninja: build stopped: subcommand failed.
make: *** [Makefile:225: px4_sitl_default] Error 1
ayaan@ayaan-HP-EliteBook-745-G3: ~/catkin_ws/src/PX4-Autopilot$

```

I have tried all the above solutions but am still stuck here . Can someone please point out what i am missing!! Thanks and Cheer!

6 Likes

rohhiit #22 October 10, 2021, 2:46am

When ever i try to run any command given in the ROS installation part, i get the following error:
E: Unmet dependencies. Try 'apt --fix-broken install' with no packages (or specify a solution).
and after running 'apt --fix-broken install' i get :
E: Sub-process /usr/bin/dpkg returned an error code (1)

f20201886 #23 October 10, 2021, 3:24am

I'm stuck at same issue as well 😞
Let me know if you find a solution

aayushi #24 October 10, 2021, 3:33am

aayushi:

sudo apt update

```
try
sudo apt --fix-broken install
```

f20201886 #25 October 10, 2021, 3:48am

– Configuring incomplete, errors occurred!

See also “/home/mohitjavale/eyantra2021_ws/src/PX4-

Autopilot/build/px4_sitl_default/build_gazebo/CMakeFiles/CMakeOutput.log”.

See also “/home/mohitjavale/eyantra2021_ws/src/PX4-

Autopilot/build/px4_sitl_default/build_gazebo/CMakeFiles/CMakeError.log”.

[2/8] Linking CXX executable bin/px4

FAILED: external/Stamp/sitl_gazebo/sitl_gazebo-configure

cd /home/mohitjavale/eyantra2021_ws/src/PX4-Autopilot/build/px4_sitl_default/build_gazebo &&

/usr/bin/cmake -DCMAKE_INSTALL_PREFIX=/usr/local -DSEND_ODOMETRY_DATA=ON -

DGENERATE_ROS_MODELS=ON -GNinja /home/mohitjavale/eyantra2021_ws/src/PX4-

Autopilot/Tools/sitl_gazebo && /usr/bin/cmake -E touch /home/mohitjavale/eyantra2021_ws/src/PX4-

Autopilot/build/px4_sitl_default/external/Stamp/sitl_gazebo/sitl_gazebo-configure

[4/8] Linking CXX executable bin/px4

ninja: build stopped: subcommand failed.

make: *** [Makefile:225: px4_sitl_default] Error 1

Any solution to this cmake issue?

Tried above said solutions...

(Note - Only change I make in installation is changing name of workspace from “catkin_ws” to “eyantra2021_ws”, idts this is an issue tho ...)

ayaan_2105 #26 October 10, 2021, 4:17am

Try running these :

```
sudo apt-get install libprotobuf-dev libprotoc-dev protobuf-compiler libeigen3-dev libxml2-utils python-
rospkg python-jinja2
```

```
sudo apt-get install libgstreamer-plugins-base1.0-dev gstreamer1.0-plugins-bad gstreamer1.0-plugins-base
gstreamer1.0-plugins-good gstreamer1.0-plugins-ugly -y
```

8 Likes

glunkad007 #28 October 10, 2021, 4:25am

Thanks man .

It worked.!!!

1 Like

anish.natekar.20031 #29 October 10, 2021, 4:29am

Thank you!! It worked :).

f20201886 #30 October 10, 2021, 4:51am

This worked, thanks. Tho if u don't mind me asking, how did u find out these pkg's were missing?

2 Likes

f20201886 #31 October 10, 2021, 4:53am

The drone is not centered in the exact middle of the environment for me...
Will this be an issue?

1 Like

aayushi #32 October 10, 2021, 4:53am

No, that's absolutely fine

2 Likes

dikkupatel3011 #34 October 10, 2021, 7:06am

I am new to this. I have a RYZEN Processor and is having only windows installed in this. Do we need to install Ubuntu in this? IF yes which version and please share the link of the version which is suppose to be installed. I want to keep both windows and ubuntu OS at same time in my laptop so please make a note of this.

aayushi #35 October 10, 2021, 7:08am

You please first refer to the task section, where the instructions are given. There we have described all this.

kruthik #36 October 10, 2021, 8:35am

After installing the px4 the drone is not centered???
is there any chance to fix this???

ayaan_2105 #37 October 10, 2021, 9:56am

Yeah man , I actually googled the necessary pkgs required to run px4 properly along with ros and found out the aforementioned pkgs 😊

1 Like

ayaan_2105 #38 October 10, 2021, 10:02am

```

t 13280
INFO [logger] logger started (mode=all)
WARN [logger] Too many subscriptions, failed to add: vehicle_trajectory_waypoint
t desired 0
INFO [logger] Start file log (type: full)
INFO [logger] [logger] ./log/2021-10-10/09_59_36.ulg
INFO [logger] Opened full log file: ./log/2021-10-10/09_59_36.ulg
INFO [navlink] MAVLink only on localhost (set param MAV_{i}_BROADCAST = 1 to enable network)
INFO [navlink] MAVLink only on localhost (set param MAV_{i}_BROADCAST = 1 to enable network)
INFO [px4] Startup script returned successfully
pxh> Gazebo multi-robot simulator, version 11.5.1
Copyright (C) 2012 Open Source Robotics Foundation.
Released under the Apache 2 License.
http://gazebo.osrf.org

[Msg] Waiting for master.
[Msg] Connected to gazebo master @ http://127.0.0.1:11345
[Msg] Publicized address: 192.168.43.42
WARN [rc_pos_control] invalid setpoints
INFO [tone_alarm] home set
INFO [tone_alarm] notify negative
  
```

I am getting these warnings while i run PX4. Are these warning normal ? Or have I not installed it properly!
Thanks and Cheers!!

2 Likes

rk972006 #39 October 10, 2021, 1:01pm

Did ur error got solved i m facing the same issue.

pateltirth2001 #42 October 10, 2021, 1:32pm

```
tirth@tirth-HP-Spectre-x360-Convertible:~/catkin_ws/src/PX4-Autopilot$ make px4_sitl_default gazebo
-- PX4 version: v1.13.0-alpha1-2614-g99b098f608
-- Found PythonInterp: /usr/bin/python3 (found suitable version "3.8.10", minimum required is "3")
-- PX4 config file: /home/tirth/catkin_ws/src/PX4-Autopilot/boards/px4/sitl/default.px4board
Traceback (most recent call last):
  File "<string>", line 1, in <module>
ModuleNotFoundError: No module named 'menuconfig'
CMake Error at cmake/kconfig.cmake:6 (message):
  kconfiglib is not installed or not in PATH

  please install using "pip3 install kconfiglib"

Call Stack (most recent call first):
  CMakeLists.txt:168 (include)

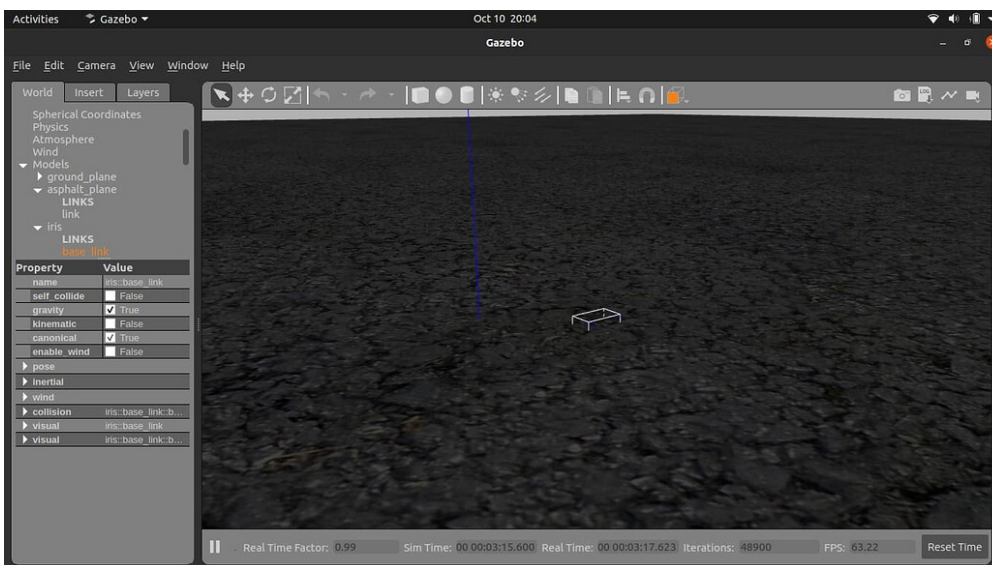
-- Configuring incomplete, errors occurred!
Error: /home/tirth/catkin_ws/src/PX4-Autopilot/build/px4_sitl_default is not a directory
make: *** [Makefile:225: px4_sitl_default] Error 1
```

Got this error after performing the last command \$make px4_sitl_default gazebo

1 Like

Ajin #43 October 10, 2021, 2:38pm

i got the same error and the drone was not placed at the centre of the world



```
Activities Terminal Oct 10 20:11
ajin@ajin-Vostro-3491: ~/catkin_ws/src/PX4-Autopilot

px4 starting.
INFO [px4] Calling startup script: /bin/sh etc/init.d-posix/rcS 0
INFO [init] found model autostart file as SYS_AUTOSTART=10016
INFO [param] selected parameter default file eepram/parameters_10016
INFO [parameters] BSON document size 428 bytes, decoded 428 bytes
[param] Loaded: eepram/parameters_10016
INFO [dataman] data manager file './dataman' size is 11798680 bytes
PX4 SIM HOST: localhost
INFO [simulator] Waiting for simulator to accept connection on TCP port 4560
INFO [simulator] Simulator connected on TCP port 4560.
INFO [commander] LED: open /dev/led0 failed (22)
Gazebo multi-robot simulator, version 11.8.1
Copyright (C) 2012 Open Source Robotics Foundation.
Released under the Apache 2 License.
http://gazebo.org

[Msg] Waiting for master.
[Msg] Connected to gazebo master @ http://127.0.0.1:11345
[Msg] Publicized address: 192.168.1.7
INFO [init] HW: etc/px4users/gund.w-main.mlx on /dev/pwm_output0
INFO [init] setting PWM_AUX_OUT none
INFO [mavlink] mode: Normal, data rate: 4000000 B/s on udp port 18570 remote port 14550
INFO [mavlink] mode: Onboard, data rate: 4000000 B/s on udp port 14580 remote port 14540
INFO [mavlink] mode: Onboard, data rate: 4000 B/s on udp port 14280 remote port 14030
INFO [mavlink] mode: Gtmbal, data rate: 400000 B/s on udp port 13030 remote port 13280
INFO [logger] logger started (nodes=all)
WARN [logger] Too many subscriptions, failed to add: vehicle_trajectory_waypoint_desired 0
INFO [logger] Start file log (type: full)
INFO [logger] [logger] ./log/2021-10-10/14_40_08.ulg
INFO [logger] Opened full log file: ./log/2021-10-10/14_40_08.ulg
INFO [mavlink] MAVLink only on localhost (set param MAV_TL_BROADCAST = 1 to enable network)
INFO [mavlink] MAVLink only on localhost (set param MAV_TL_BROADCAST = 1 to enable network)
INFO [px4] Startup script returned successfully
px4> INFO [tone_alarm] home set
INFO [tone_alarm] notify negative
```


Oalpha #44 October 10, 2021, 3:48pm

Can you send the link(s) you referred to? I'm unable find any website that talks about PX4 installation & launch and leads me to those packages, as of yet.

Oalpha #45 October 10, 2021, 3:48pm

Yes, it got fixed. Refer to [@ayaan_2105](#) 's comment.

rohhiit #47 October 10, 2021, 9:44pm

```

rohit@rohit-Lenovo-V310-14ISK: ~/catkin_ws/src/PX4-Autopilot
The following packages were automatically installed and are no longer required:
  libfprint-2-todi shin
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 30 not upgraded.
rohit@rohit-Lenovo-V310-14ISK:~/catkin_ws/src/PX4-Autopilot$ sudo apt autoremove
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages will be REMOVED:
  libfprint-2-todi shin
0 upgraded, 0 newly installed, 2 to remove and 30 not upgraded.
After this operation, 187 kB disk space will be freed.
Do you want to continue? [Y/n] Y
(Reading database ... 273883 files and directories currently installed.)
Removing libfprint-2-todi:amd64 (1:1.90.2+to1-0ubuntu1-20.04.4) ...
Removing shin (15.4-0ubuntu9) ...
Processing triggers for libc-bin (2.31-0ubuntu9.2) ...
rohit@rohit-Lenovo-V310-14ISK:~/catkin_ws/src/PX4-Autopilot$ make px4_sitl_default gazebo
-- PX4 version: v1.13.0-alpha1-2615-ge2f048f608
-- Found PythonInterp: /usr/bin/python3 (found suitable version "3.8.10", minimum required is "3")
-- PX4 config file: /home/rohit/catkin_ws/src/PX4-Autopilot/boards/px4/sitl/default.px4board
Traceback (most recent call last):
  File "<string>", line 1, in <module>
ModuleNotFoundError: No module named 'menuconfig'
CMake Error at cmake/kconfig.cmake:6 (message):
  kconfiglib is not installed or not in PATH
please install using "pip3 install kconfiglib"
Call Stack (most recent call first):
  CMakeLists.txt:168 (include)

-- Configuring incomplete, errors occurred!
Error: /home/rohit/catkin_ws/src/PX4-Autopilot/build/px4_sitl_default is not a directory
make: *** [Makefile:225: px4_sitl_default] Error 1
rohit@rohit-Lenovo-V310-14ISK:~/catkin_ws/src/PX4-Autopilot$

```

I am facing this problem after after running the code.

I have tried all the above suggested solutions.

The Error:

- PX4 version: v1.13.0-alpha1-2615-ge2f048f608
- Found PythonInterp: /usr/bin/python3 (found suitable version “3.8.10”, minimum required is “3”)
- PX4 config file: /home/rohit/catkin_ws/src/PX4-Autopilot/boards/px4/sitl/default.px4board

Traceback (most recent call last):

File “”, line 1, in

ModuleNotFoundError: No module named ‘menuconfig’

CMake Error at cmake/kconfig.cmake:6 (message):

kconfiglib is not installed or not in PATH

please install using “pip3 install kconfiglib”

Call Stack (most recent call first):

CMakeLists.txt:168 (include)

– Configuring incomplete, errors occurred!

Error: /home/rohit/catkin_ws/src/PX4-Autopilot/build/px4_sitl_default is not a directory

make: *** [Makefile:225: px4_sitl_default] Error 1

[iyereshwar09](#) #48 October 11, 2021, 4:41am

i have tired all the given solution but i am facing same issue

[aayushi](#) #52 October 11, 2021, 5:35am

You are already in your catkin_ws. Secondly you are accessing using root privileges, which is not required.

First press Ctrl+D, and then type the following command

```
cd ..
```

After this try to access your catkin_ws, this should work.

1 Like

[aayushi](#) #53 October 11, 2021, 5:36am

As the error states, first install kconfiglib using the following command

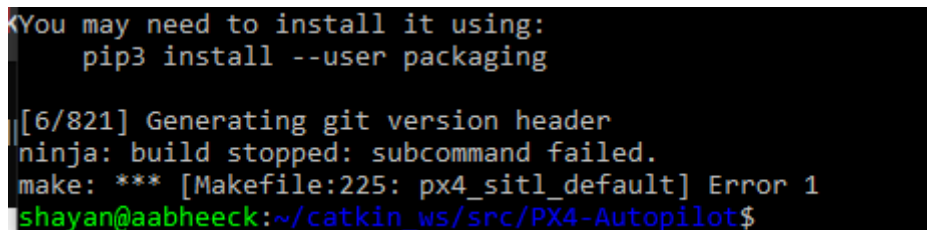
```
pip3 install kconfiglib
```

Then again run the make command

[aayushi](#) #55 October 11, 2021, 5:42am

Please refer to [@ayaan_2105](#) comment

[SENTRY](#) #56 October 11, 2021, 5:49am



```
You may need to install it using:
  pip3 install --user packaging

[6/821] Generating git version header
ninja: build stopped: subcommand failed.
make: *** [Makefile:225: px4_sitl_default] Error 1
shayan@aabheek:~/catkin_ws/src/PX4-Autopilot$
```

[@aayushi](#) again getting this new error while running this command make px4_sitl_default gazebo

[aayushi](#) #57 October 11, 2021, 5:54am

The solution is suggested by the command, just try to figure it out. You can see it is written “you may need to install it using”

So try to run the command suggested i.e

```
pip3 install --user packaging
```

sahildafade123 #59 October 11, 2021, 6:06am

i was also facing same problem buddy every time you get a error concentrate on last few line are they asking to install some packages so yes in this they are asking you to install

```
pip3 install --user packaging
```

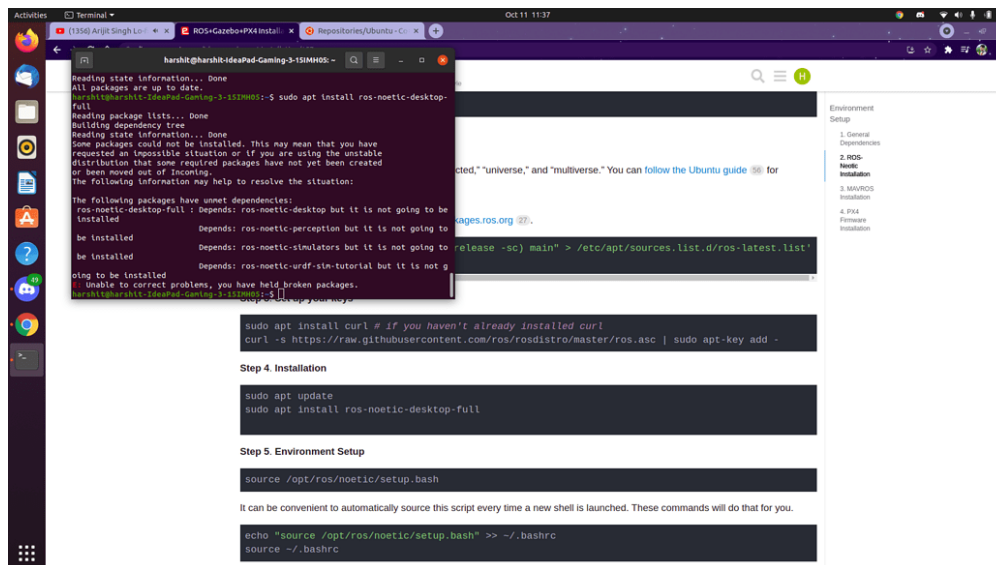
copy this and paste there and run it they will install some packaging and after sucessfull run run the comand

```
make px4_sitl_default gazebo
```

u will get a errorless run if not follow the steps i said again

1 Like

Harshit3401 #60 October 11, 2021, 6:10am



I am getting this error while step 4 installation of ROS. Can anyone help

1 Like

SENTRY #61 October 11, 2021, 6:12am

```
-- Configuring incomplete, errors occurred!
See also "/home/shayan/catkin_ws/src/PX4-Autopilot/build/px4_sitl_default/build_gazebo/CMakeFiles/CMakeOutput.log".
See also "/home/shayan/catkin_ws/src/PX4-Autopilot/build/px4_sitl_default/build_gazebo/CMakeFiles/CMakeError.log".
[481/816] Building CXX object src/modules/events/CMakeFiles/modules__events.dir/status_display.cpp.o
FAILED: external/Stamp/sitl_gazebo/sitl_gazebo-configure
cd /home/shayan/catkin_ws/src/PX4-Autopilot/build/px4_sitl_default/build_gazebo && /usr/bin/cmake -DCMAKE_INSTALL_PREFIX=
/usr/local -DSEND_ODOMETRY_DATA=ON -DGENERATE_ROS_MODELS=ON -GNinja /home/shayan/catkin_ws/src/PX4-Autopilot/Tools/sitl_
_gazebo && /usr/bin/cmake -E touch /home/shayan/catkin_ws/src/PX4-Autopilot/build/px4_sitl_default/external/Stamp/sitl_g
azebo/sitl_gazebo-configure
[487/816] Building CXX object src/modules/ekf2/CMakeFiles/modules__ekf2.dir/EKF2.cpp.o
ninja: build stopped: subcommand failed.
make: *** [Makefile:225: px4_sitl_default] Error 1
shayan@aabheek:/catkin_ws/src/PX4-Autopilot$
```

I did as u said buddy but still I'm getting the same error

@sahildafade123 @aayushi

1 Like

sahildafade123 #65 October 11, 2021, 8:09am

sudo apt update

sudo apt --fix-broken install

sudo apt-get install libprotobuf-dev libprotoc-dev protobuf-compiler libeigen3-dev libxml2-utils python-
rospkg python-jinja2

sudo apt-get install libgstreamer-plugins-base1.0-dev gstreamer1.0-plugins-bad gstreamer1.0-plugins-base
gstreamer1.0-plugins-good gstreamer1.0-plugins-ugly -y

try this might work

1 Like

Harshit3401 #66 October 11, 2021, 8:34am

After running the third line of this command it is showing syntax error

Harshit3401 #67 October 11, 2021, 8:57am

I am also getting this same problem. Does it got solved buddy?

shivamakulkarni57 #68 October 11, 2021, 11:50am

these commands helped a lot thank you !!! **100 100**

PratikA2002 #69 October 11, 2021, 3:10pm

Facing trouble in the last segment of MARVOS Installation!!!

```
pratika@pratika-VirtualBox:~/catkin_ws$ rosdep install --from-paths src --ignore-src -y
ERROR: the following packages/stacks could not have their rosdep keys resolved
to system dependencies:
px4: Cannot locate rosdep definition for [mav_msgs]
pratika@pratika-VirtualBox:~/catkin_ws$ rosdep install --from-paths src --ignore-src --rosdistro=
{ROS_DISTRO} -y ERROR: the following packages/stacks could not have their rosdep keys resolved to
system dependencies: px4: Cannot locate rosdep definition for [mav_msgs] pratika@pratika-
VirtualBox:~/catkin_ws
any solutions???
```

ryan_19vt #70 October 11, 2021, 4:39pm

I faced the same issue. I just deleted the catkin_ws file and started over as I wasn't getting past this problem. Just saying even though this isn't a proper solution...hoping it helps!

singhmaanvi3 #71 October 12, 2021, 3:35am

aayushi:

```
make px4_sitl_default gazebo
```

```
px4 starting.
INFO [px4] Calling startup script: /bin/sh etc/init.d-posix/rcS 0
INFO [init] found model autostart file as SYS_AUTOSTART=10016
INFO [param] selected parameter default file eeprom/parameters.10016
INFO [parameters] BSON document size 428 bytes, decoded 428 bytes
[param] Loaded: eeprom/parameters.10016
INFO [dataman] data manager file './dataman' size is 11798680 bytes
PX4 SIM HOST: localhost
INFO [simulator] Waiting for simulator to accept connection on TCP port 4560
INFO [simulator] Simulator connected on TCP port 4560.
INFO [commander] LED: open /dev/led0 failed (22)
INFO [init] Mixer: etc/mixers/quad_w.main.mix on /dev/pwm_output0
INFO [init] setting PWM_AUX_OUT none
INFO [mavlink] mode: Normal, data rate: 4000000 B/s on udp port 18570 remote port 14550
INFO [mavlink] mode: Onboard, data rate: 4000000 B/s on udp port 14580 remote port 14540
Gazebo multi-robot simulator, version 11.8.1
Copyright (C) 2012 Open Source Robotics Foundation.
Released under the Apache 2 License.
http://gazebo.in.org

[Msg] Waiting for master.
INFO [mavlink] mode: Onboard, data rate: 4000 B/s on udp port 14280 remote port 14030
[Msg] Connected to gazebo master @ http://127.0.0.1:11345
[Msg] Publicized address: 192.168.29.91
INFO [mavlink] mode: Gimbal, data rate: 400000 B/s on udp port 13030 remote port 13280
INFO [logger] logger started (mode=all)
WARN [logger] Too many subscriptions, failed to add: vehicle_trajectory_waypoint_desired 0
INFO [logger] Start file log (type: full)
INFO [logger] [logger] ./log/2021-10-12/03_30_57.ulog
INFO [mavlink] MAVLink only on localhost (set param MAV_{i}_BROADCAST = 1 to enable network)
INFO [mavlink] MAVLink only on localhost (set param MAV_{i}_BROADCAST = 1 to enable network)
INFO [logger] Opened full log file: ./log/2021-10-12/03_30_57.ulog
[px4] Startup script returned successfully
px4: [Err] [InsertModelWidget.cc:402] Missing model.config for model "/home/naanvisingh03/Learn-ROS/.git"
[Err] [InsertModelWidget.cc:402] Missing model.config for model "/home/naanvisingh03/Learn-ROS/Sample_Task1"
[Err] [InsertModelWidget.cc:402] Missing model.config for model "/home/naanvisingh03/Learn-ROS/beginner_tutorials"
[Err] [InsertModelWidget.cc:402] Missing model.config for model "/home/naanvisingh03/Learn-ROS/snapshots"
[Err] [InsertModelWidget.cc:402] Missing model.config for model "/home/naanvisingh03/Learn-ROS/turtlesim_cleaner"
INFO [tone_alarm] home set
INFO [tone_alarm] notify negative
```

It's looking for the models in a different git repository. How do I fix this?

SENTRY #72 October 12, 2021, 5:08am

```
px4 starting.
INFO [px4] Calling startup script: /bin/sh etc/init.d-posix/rcS 0
INFO [init] found model autostart file as SYS_AUTOSTART=10016
INFO [param] selected parameter default file eeprom/parameters_10016
[param] parameter file not found, creating eeprom/parameters_10016
SYS_AUTOCONFIG: curr: 0 -> new: 1
SYS_AUTOSTART: curr: 0 -> new: 10016
CAL_ACC0_ID: curr: 0 -> new: 1310988
CAL_GYRO0_ID: curr: 0 -> new: 1310988
CAL_ACC1_ID: curr: 0 -> new: 1310996
CAL_GYRO1_ID: curr: 0 -> new: 1310996
CAL_ACC2_ID: curr: 0 -> new: 1311004
CAL_GYRO2_ID: curr: 0 -> new: 1311004
CAL_MAG0_ID: curr: 0 -> new: 197388
CAL_MAG1_ID: curr: 0 -> new: 197644
SENS_BOARD_X_OFF: curr: 0.0000 -> new: 0.0000
SENS_DPRES_OFF: curr: 0.0000 -> new: 0.0010
* SYS_AUTOCONFIG: curr: 1 -> new: 0
IMU_INTEG_RATE: curr: 200 -> new: 250
INFO [dataman] data manager file './dataman' size is 11798680 bytes
PX4 SIM HOST: localhost
INFO [simulator] Waiting for simulator to accept connection on TCP port 4560
```

Nothing happening after this what should I do ? @aayushi

gs2014019 #73 October 12, 2021, 10:00am

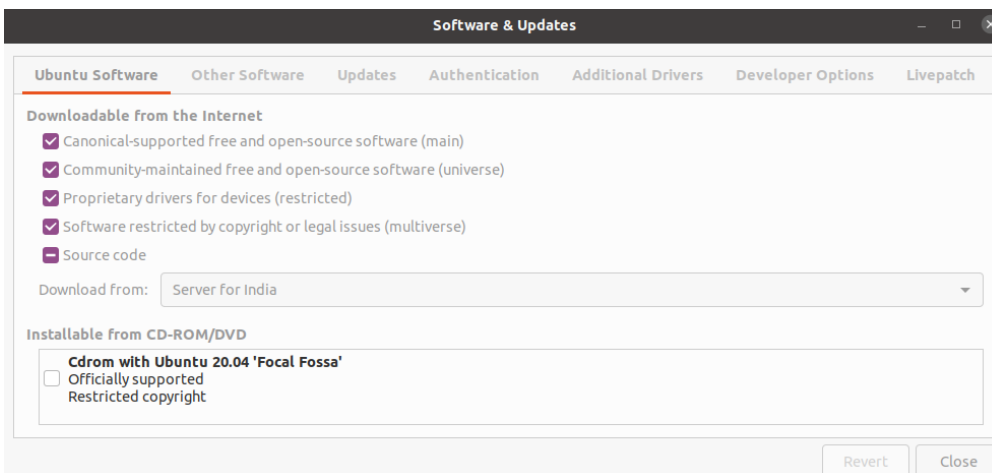
aayushi:

```
export ROS_PACKAGE_PATH=$ROS_PACKAGE_PATH:~/catkin_ws/src/PX4-
Autopilot/Tools/sitl_gazebo
```

i am facing same problem !!

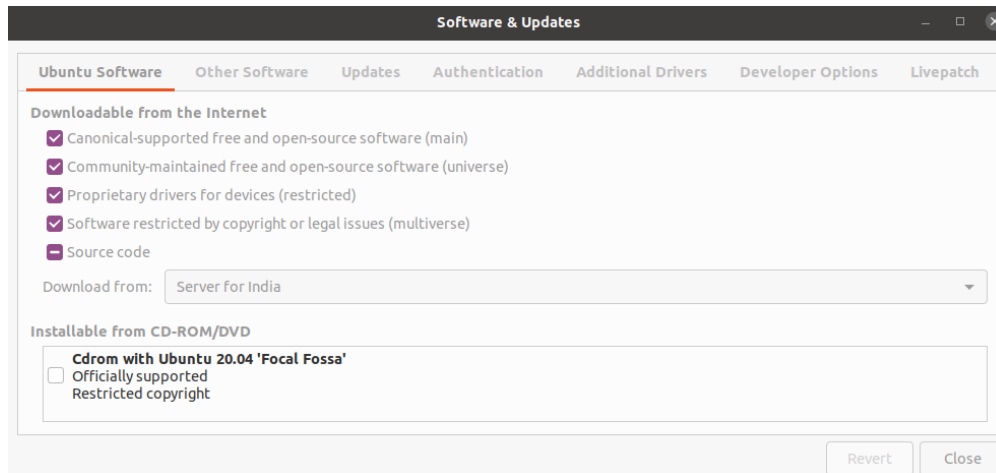
harisonic #74 October 12, 2021, 2:50pm

Try going to software & updates in applications and in the ubuntu software menu, click the source code. It may solve your issue.



harisonic #75 October 12, 2021, 3:03pm

Go to software and updates application. Inside that, click source code. Then start the installation from the beginning.



1 Like

Kazip #76 October 12, 2021, 3:07pm

The first time when I ran the code, it worked and the drone was also visible in Gazebo.

But when I run the undermentioned command for the second time to open up the drone simulation again, I get a new error. Can someone please tell me what the problem is...

```
~/catkin_ws/src/PX4-Autopilot$ make px4_sitl_default gazebo
```

```
ERROR [px4_daemon] error binding socket /tmp/px4-sock-0, error = Address already in use
```

```
| ____ \\ \\ // |
| / / \ V // / |
| _ // \ / |
| | / ^ \ ____ |
| // | /
```

px4 starting.

```
INFO [px4] Calling startup script: /bin/sh etc/init.d-posix/rcS 0
INFO [init] found model autostart file as SYS_AUTOSTART=10016
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
[param] FAILED loading eeprom/parameters_10016
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
```

ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied
ERROR [px4_daemon] error connecting to socket: Permission denied

[singhmaanvi3](#) #77 October 13, 2021, 4:45am

[@aayushi](#) please help with this

singhmaanvi3:


```

px4 starting.
INFO [px4] Calling startup script: /bin/sh etc/init.d-posix/rcs 0
INFO [init] found model autostart file as SYS_AUTOSTART=10016
INFO [param] selected parameter default file eeprom/parameters_10016
INFO [parameters] BSON document size 428 bytes, decoded 428 bytes
[param] Loaded: eeprom/parameters_10016
INFO [dataman] data manager file './dataman' size is 11798680 bytes
PX4 SIM HOST: localhost
INFO [simulator] Waiting for simulator to accept connection on TCP port 4560
INFO [simulator] Simulator connected on TCP port 4560.
INFO [commander] LED: open /dev/led0 failed (22)
INFO [init] Mixer: etc/mixers/quad_w.main.mix on /dev/pwm_output0
INFO [init] setting PWM_AUX_OUT none
INFO [mavlink] mode: Normal, data rate: 4000000 B/s on udp port 18570 remote port 14550
INFO [mavlink] mode: Onboard, data rate: 4000000 B/s on udp port 14580 remote port 14540
Gazebo multi-robot simulator, version 11.8.1
Copyright (C) 2012 Open Source Robotics Foundation.
Released under the Apache 2 License.
http://gazebo-sim.org

[Msg] Waiting for master.
INFO [mavlink] mode: Onboard, data rate: 4000 B/s on udp port 14280 remote port 14030
[Msg] Connected to gazebo master @ http://127.0.0.1:11345
[Msg] Publicized address: 192.168.29.91
INFO [mavlink] mode: Gimbal, data rate: 400000 B/s on udp port 13030 remote port 13280
INFO [logger] logger started (mode=all)
WARN [logger] Too many subscriptions, failed to add: vehicle_trajectory_waypoint_desired 0
INFO [logger] Start file log (type: full)
INFO [logger] [logger] ./log/2021-10-12/03_30_57.ulg
INFO [mavlink] MAVLink only on localhost (set param MAV_{i}_BROADCAST = 1 to enable network)
INFO [mavlink] MAVLink only on localhost (set param MAV_{i}_BROADCAST = 1 to enable network)
INFO [logger] Opened full log file: ./log/2021-10-12/03_30_57.ulg
INFO [px4] Startup script returned successfully
pxh> [Err] [InsertModelWidget.cc:402] Missing model.config for model "/home/maanvisingh03/Learn-ROS/.git"
[Err] [InsertModelWidget.cc:402] Missing model.config for model "/home/maanvisingh03/Learn-ROS/Sample_Task1"
[Err] [InsertModelWidget.cc:402] Missing model.config for model "/home/maanvisingh03/Learn-ROS/beginner_tutorials"
[Err] [InsertModelWidget.cc:402] Missing model.config for model "/home/maanvisingh03/Learn-ROS/snapshots"
[Err] [InsertModelWidget.cc:402] Missing model.config for model "/home/maanvisingh03/Learn-ROS/turtlesim_cleaner"
INFO [tone_alarm] home set
INFO [tone_alarm] notify negative

```

It's looking for the models in a different git repository. How do I fix this?

SreejaKadari #78 October 13, 2021, 6:06am

I got the same error. Let me know if you find a solution

devyanshitegwal8130 #79 October 13, 2021, 9:00am

 **16341155964222887086574583719520**

Why I am getting this error?

aayushi #80 October 13, 2021, 9:43am

try the comment marked as solution

aayushi #81 October 13, 2021, 9:48am

Make sure to configure your Ubuntu repositories to allow `restricted`, `universe`, and `multiverse`. See [this](#) for a guide on how to do that.

[devyanshitegwal8130](#) #82 October 13, 2021, 10:06am

yes i was doing the same but i am unable to find PPA's Launchpad page which is needed to find the location for apt line. could you please help me?

[udaysharmasss_ece18](#) #83 October 13, 2021, 10:34am

 [IMG-20211013-WA0012](#)

What to do after getting this error?

[bajajanirudha](#) #84 October 13, 2021, 11:26am

The following packages will be upgraded:

curl libcurl4 libgl1-mesa-dri libglapi-mesa libglx-mesa0
libssl1.1

6 upgraded, 1495 newly installed, 0 to remove and 55 not upgraded.

Need to get 711 MB/711 MB of archives.

After this operation, 3419 MB of additional disk space will be used.

Do you want to continue? [Y/n]

-----should I allow to for additional disk space to be used or is it is not necessary (I mean can I do n ?)this is regarding ros

[123004265](#) #85 October 13, 2021, 3:27pm

I also got the same. Is it correct?

[udaysharmasss_ece18](#) #86 October 13, 2021, 5:09pm

Thanks Bro !!! It Worked

[viranchils.ec20](#) #87 October 13, 2021, 8:51pm

I am facing problem with ROS installation step 5 ,environment setup , it is showing me permission denied

```

vls@vls-IdeaPad-Gaming3-15ARH05D: /media/vls/New Volu...
File Edit View Search Terminal Tabs Help
vls@vls-IdeaPad-Ga... x roscore http://vls-Id... x vls@vls-IdeaPad-Ga... x
YP-Spur is a mobile robot motion control software with coordinate frame based
commands.

ros-noetic-yppur-dbgSYM/focal 1.20.2-1focal.20210423.224436 amd64
  debug symbols for ros-noetic-yppur

ros-noetic-yppur-ros/focal 0.3.5-1focal.20210922.193344 amd64
  ROS wrapper for the mobile robot control platform YP-Spur

ros-noetic-yppur-ros-dbgSYM/focal 0.3.5-1focal.20210922.193344 amd64
  debug symbols for ros-noetic-yppur-ros

ros-noetic-zbar-ros/focal 0.3.0-1focal.20210922.200312 amd64
  Lightweight ROS wrapper for Zbar barcode/qr code reader library (http://zbar.s
  ourceforge .net/)

ros-noetic-zbar-ros-dbgSYM/focal 0.3.0-1focal.20210922.200312 amd64
  debug symbols for ros-noetic-zbar-ros

vls@vls-IdeaPad-Gaming3-15ARH05D:/media/vls/New Volume/ROS GAZEBO pilot/ros_dir
$ /opt/ros/noetic/setup.bash
bash: /opt/ros/noetic/setup.bash: Permission denied
vls@vls-IdeaPad-Gaming3-15ARH05D:/media/vls/New Volume/ROS GAZEBO pilot/ros_dir

```

harisonic #88 October 14, 2021, 2:02am

The command is → ``

source /opt/ros/noetic/setup.bash

Try entering the full command..

rudrajyotid88 #89 October 14, 2021, 2:27am

Hey, so I had followed all the steps as mentioned and for the errors I tried all the methods suggested here...

aayushi:

make px4_sitl_default gazebo

However after executing this command, I checked my terminal and found the following:

```

Activities Terminal Oct 14 07:50
rudra@rudra-Lenovo-Ideapad-330-15IKB: ~/catkin_ws/src/PX4-Autopilot

[Warn] [GuiInterface:298] Couldn't locate specified .ini. Creating file at "/home/rudra/.gazebo/gut.ini"
Creating symlink /home/rudra/catkin_ws/src/PX4-Autopilot/build/px4_sitl_default/etc -> /home/rudra/catkin_ws/src/PX4-Au

PX4
px4 starting.

INFO [px4] Calling startup script: /bin/sh etc/init.d-posix/rcS 0
INFO [init] found model autostart file as SYS_AUTOSTART=10016
INFO [param] selected parameter default file eepron/parameters_10016
[param] parameter file not found, creating eepron/parameters_10016
SYS_AUTOCONFIG: curr: 0 -> new: 1
SYS_AUTOSTART: curr: 0 -> new: 10016
CAL_ACC0_ID: curr: 0 -> new: 1310988
CAL_GYRO0_ID: curr: 0 -> new: 1310988
CAL_ACC1_ID: curr: 0 -> new: 1310996
CAL_GYRO1_ID: curr: 0 -> new: 1310996
CAL_ACC2_ID: curr: 0 -> new: 1311004
CAL_GYRO2_ID: curr: 0 -> new: 1311004
CAL_MAG0_ID: curr: 0 -> new: 197388
CAL_MAG1_ID: curr: 0 -> new: 197644
SENS_BOARD_X_OFF: curr: 0.0000 -> new: 0.0000
SENS_OPRES_OFF: curr: 0.0000 -> new: 0.0010
* SYS_AUTOCONFIG: curr: 1 -> new: 0
IMU_INTEG_RATES: curr: 200 -> new: 250
INFO [dataman] data manager file './dataman' size is 11798680 bytes
PX4 SIM HOST: localhost
INFO [simulator] Waiting for simulator to accept connection on TCP port 4560
INFO [simulator] Simulator connected on TCP port 4560.
INFO [commander] LED: open /dev/led0 failed (22)
PWM_AUX_OUT: curr: 0 -> new: 1234
PWM_MAIN_OUT: curr: 0 -> new: 1234
INFO [init] Mixer: etc/mixers/quad_w.main.mtx on /dev/pwm_output0
INFO [init] setting PWM_AUX_OUT none
INFO [mavlink] mode: Normal, data rate: 4000000 B/s on udp port 18570 remote port 14550
INFO [mavlink] mode: Onboard, data rate: 4000000 B/s on udp port 14580 remote port 14540
INFO [mavlink] mode: Onboard, data rate: 4000 B/s on udp port 14280 remote port 14030
INFO [mavlink] mode: Gmbal, data rate: 400000 B/s on udp port 13030 remote port 13280
INFO [logger] logger started (mode=all)
WARN [logger] Too many subscriptions, failed to add: vehicle_trajectory_waypoint_desired 0
INFO [logger] Start file log (type: full)
INFO [mavlink] MAVLink only on localhost (set param MAV_{i}_BROADCAST = 1 to enable network)
INFO [mavlink] MAVLink only on localhost (set param MAV_{i}_BROADCAST = 1 to enable network)
INFO [px4] Startup script returned successfully
pxh> INFO [logger] [logger] ./log/2021-10-14/02_18_26.ulg
INFO [logger] Opened full log file: ./log/2021-10-14/02_18_26.ulg
INFO [tone_alarm] home set
WARN [mc_pos_control] invalid setpoints
INFO [tone_alarm] notify negative

```

Do I need to worry about those WARN lines written in yellow?

viranchils.ec20 #90 October 14, 2021, 5:11am

It is still showing the same that is, permission denied.

singhmaanvi3 #91 October 14, 2021, 5:39am

(post deleted by author)

singhmaanvi3 #92 October 14, 2021, 5:52am

Yea I'm also getting these warnings. Let me know if you find a solution.