Gazebo : Tutorial : Ubuntu

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Ubuntu

Install Gazebo using Ubuntu packages

This tutorial covers the installation of Gazebo packages using the the osrfoundation.org repository, designed for those who want to follow the faster development path but still a stable one.

Gazebo is also released as an Ubuntu official package: (check which version (https://packages.ubuntu.com/search?

suite=all§ion=all&arch=any&keywords=gazebo&searchon=sourcenames) is available for every distribution. If you are a ROS (http://ros.org) user, please read the tutorial about ROS/Gazebo installation (http://gazebosim.org/tutorials?tut=ros_wrapper_versions&cat=connect_ros).

Default installation: one-liner

1. Install

```
curl -sSL http://get.gazebosim.org | sh
```

2. Run

gazebo

Alternative installation: step-by-step

1. Setup your computer to accept software from packages.osrfoundation.org.

```
sudo sh -c 'echo "deb http://packages.osrfoundation.org/gazebo/ubuntu-stable `lsb_relea
se -cs` main" > /etc/apt/sources.list.d/gazebo-stable.list'
```

You can check to see if the file was written correctly. For example, in Ubuntu Bionic (18.04), you can type:

```
cat /etc/apt/sources.list.d/gazebo-stable.list
```

And if everything is correct, you should see:

```
deb http://packages.osrfoundation.org/gazebo/ubuntu-stable bionic main
```

2. Setup keys

```
wget https://packages.osrfoundation.org/gazebo.key -O - | sudo apt-key add -
```

3. Install Gazebo.

First update the debian database:

```
sudo apt-get update
```

Hint: make sure the apt-get update process ends without any errors, the console output ends in **Done** similar to below:

```
$ sudo apt-get update
...
Hit http://ppa.launchpad.net bionic/main Translation-en
Ign http://us.archive.ubuntu.com bionic/main Translation-en_US
Ign http://us.archive.ubuntu.com bionic/multiverse Translation-en_US
Ign http://us.archive.ubuntu.com bionic/restricted Translation-en_US
Ign http://us.archive.ubuntu.com bionic/universe Translation-en_US
Reading package lists... Done
```

Next install gazebo-11 by:

```
sudo apt-get install gazebo11
# For developers that work on top of Gazebo, one extra package
sudo apt-get install libgazebo11-dev
```

If you see the error below:

```
$ sudo apt-get install gazebo11
Reading package lists... Done
Building dependency tree
Reading state information... Done
E: Unable to locate package gazebo11
```

It's possible the version of Gazebo you are looking for is not supported on the version of OS you are using. For example, installing gazebo11 on Ubuntu Xenial (16.04) will produce the error above. Hint: Take a look at "Project Status" section at http://gazebosim.org/#status (http://gazebosim.org/#status), next to each version is the supported ubuntu versions and ROS versions.

4. Check your installation

```
gazebo
```

Gazebo in different deb packages

Gazebo ships different Ubuntu debian packages following the official packaging guidelines (https://www.debian.org/doc/manuals/maint-guide/):

- Use Gazebo as an application: for the users that just run Gazebo simulator with the provided plugins and models and do not plan on developing on top of gazebo its own custom software. To use Gazebo 11 please install the package called *gazebo11*.
- Use Gazebo to develop software using Gazebo libraries: for users that develop plugins or any other kind
 of software that needs Gazebo headers and libraries. In this case, together with gazebo11 package,
 please install *libgazebo11-dev*.

2020/11/6

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