## What's Past the End? The Future of ROS One



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# Probably not.

I mean, in the long run, definitely no, you should switch to ROS 2.

Does that mean that everything is working great on ROS 2? Ehhh...

I mean ROS 1 has its problems, but there's a ton of stuff, where you're like, "Wait, you mean they haven't figured out X yet?"

However, ROS 1 has a ticking clock and will only be supported until 2025.

## ros.org

## Open Robotics's Software Support

However, ROS 1 has a <u>ticking clock</u> and will only be supported until 2025.

- Buildfarm (prominently) for Ubuntu 20.04
- rosdistro noetic distribution management

... as OR's resources permit

Where does that leave us on newer systems?

#### What most people do (Ubuntu until focal):

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

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

\$ apt update

\$ apt install ros-noetic-desktop-full

#### **Debian GNU/Linux:**

\$ apt install ros-desktop-full

#### **Arch Linux (AUR):**

\$ paru -S ros-noetic-desktop-full

#### RoboStack:

- \$ mamba create -n ros\_env python=3.9
- \$ conda activate ros\_env
- \$ conda config --env --add channels robostack
- \$ mamba install ros-noetic-desktop-full

#### From Source:

\$ catkin build

#### From Source:

```
$ rosinstall_generator \
    -rosdistro noetic -deps [--upstream-development] \
    desktop | vcs import
```

\$ catkin build

```
[build] Summary: 53 of 184 packages succeeded.
[build]
         Ignored: None.
[build]
         Warnings: 54 packages succeeded with warnings.
        Abandoned: 130 packages were abandoned.
[build]
[build]
       Failed: 1 packages failed.
[build] Runtime: 2 minutes and 52.0 seconds total.
[build] Note: Workspace packages have changed, please re-source setup files to use them.
```

## **Updated Dependencies**

- log4cxx 0.11-0.13
- C++17
- OGRE 1.12
- SIP 5/6
- ...

### **External packagers either**

- Pin their dependencies
  - Keep the 'focal' versions
- Maintain patch sets
  - Distribution-specific overhead

## ROS-O / https://github.com/ros-o



- ROS...
  - One
  - Obese Ocadia
  - Obsolete
- Pick your preferred interpretation

## ROS-O / https://github.com/ros-o

- ROS-O collects patches across packager efforts
- Provide patched source repositories if `noetic-devel` fails to build
- As of today 56+ patched repositories (contributed back to upstream `noetic-devel` where possible)

- Package maintenance is volunteer effort
- If you need packages fixed: contribute patches
- If you need packages built: use any distributor and support them