1. Introduction

Official documentation

- A workspace is a directory containing ROS 2 packages. Is a ROS term for the location on the system where it is been developing with ROS 2.

1.1 Hierarchy

- Underlay: Is the core space, i.e. the ROS distro install,that contents other workspaces (overlays). It must contain the dependencies of all the packages in your overlay

- Overlay: A secondary workspace where you new packages are added without interfering with the existing workspace that is being extended.

    - It’s possible to have several layers of underlays and overlays, with each successive overlay using the packages of its parent underlays.
    - Combining workspaces makes developing against different versions of ROS 2, or against different sets of packages, easier. It also allows the installation of several ROS 2 distributions
    - This is accomplished by sourcing setup files every time you open a new shell, or by adding the source command to your shell startup script once. Without sourcing the setup files, you won’t be able to access ROS 2 commands, or find or use ROS 2 packages

2. Creating a workspace

1. Create the workspace directory with a src directory inside:
2. Solve the packages dependencies **(Only if it was cloned by a repo)**
3. Build with Colcon
4. Source:
    - Important: Use a new terminal

```
source ~/<workspace>/install/setup.bash
```

3. Directories

- src folder: where the source code is placed
- build folder: where intermediate files are stored.
- install folder: where each package will be installed.
- log folder: where all the logging information is available.