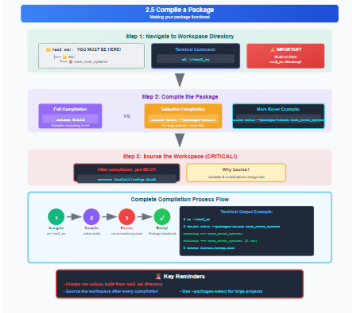


## ROS 2 Basic Concepts

Estimated time to completion: 2 minutes

### 2.5 Compile a Package



When you create a package, you need to compile it to make it functional. The command used by ROS2 for compilation is as follows:

In [ ]:

```
colcon build
```

- IMPORTANT -

This command will compile everything in your `src` directory, and must be run from your `ros2_ws` directory to work. **Please remember this!**

- IMPORTANT -

- Example 2.4 -

Navigate to your `ros2_ws` directory and compile the source folder, by typing the following command:

Execute in Terminal #1

In [ ]:

```
cd ~/ros2_ws
```

In [ ]:

```
colcon build
```

After compiling, you also need to `source` the workspace to ensure that the latest modifications and updates are taken into account:

Execute in Terminal #1

In [ ]:

```
source install/setup.bash
```

For large projects, you may not want to compile all of your packages, as this can take a long time. Instead, you can use the following command to compile only the packages where you have made changes:

In [ ]:

```
colcon build --packages-select <package_name>
```

This command will compile only the specified packages and their dependencies.

Now, try compiling your package named `mars_rover_systems` using this command.

Execute in Terminal #1

In [ ]:

```
colcon build --packages-select mars_rover_systems
```

- End of Example 2.4 -

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