

ROS2 Launch 파일

rpm_speed.launch.py

하나 이상의 정해진 노드를 실행할 수 있음
노드를 실행할 때 패키지의 매개변수나 노드 이름 변경,
노드 네임스페이스 설정, 환경변수 변경 등의 옵션을
설정함.

src/rpm_topic_pkg/launch/rpm_speed.launch.py

```
from launch import LaunchDescription
from launch_ros.actions import Node
from launch.actions import ExecuteProcess

def generate_launch_description():
    return LaunchDescription([
        Node(
            package='rpm_topic_pkg',
            executable='rpm_pub_script',
            name='rpm_pub_node'
        ),
        Node(
            package='rpm_topic_pkg',
            executable='speed_calc_script',
            name='speed_calc_node',
            parameters=[
                {'wheel_radius': 0.5}
            ]
        ),
        Node(
            package='rpm_topic_pkg',
            executable='speed_sub_script',
            name='speed_sub_node'
        ),
        ExecuteProcess(
            cmd=['ros2', 'topic', 'list'],
            output='screen'
        )
    ])
```

파이썬 패키지 설정 파일(setup.py)

ROS2 파이썬 패키지에서 배포를 위한 파일

setup.py

src/rpm_topic_pkg/setup.py

```
from setuptools import setup
import glob
import os

package_name = 'my_py_pkg'

setup(
    name=package_name,
    version='0.1.0',
    packages=[package_name],
    data_files=[
        ('share/ament_index/resource_index/packages',
         ['resource/' + package_name]),
        ('share/' + package_name,
         ['package.xml']),
        ('share/' + package_name + '/launch',
         glob.glob(os.path.join('launch',
                                '*.launch.py'))),
        ('share/' + package_name + '/param',
         glob.glob(os.path.join('param', '*.yaml'))),
    ],
    install_requires=['setuptools'],
    zip_safe=True,
    maintainer='sohi',
    maintainer_email='sohicode@gmail.com',
    description='TODO: Package description',
    license='TODO: License declaration',
    tests_require=['pytest'],
    entry_points={
        'console_scripts': [
            'rpm_pub_script = '
            rpm_topic_pkg.rpm_pub:main'
            'speed_calc_script = '
            rpm_topic_pkg.speed_calc:main'
            'speed_sub_script = '
            rpm_topic_pkg.speed_sub:main'
        ],
    },
)
```

빌드

build & run

```
$ cd ~/Workspaces/ros2_ws
$ colcon build --symlink-install --packages-
select rpm_topic_pkg
$ source ./install/setup.bash
```

런치 실행(ros2 launch)

```
$ ros2 launch rpm_topic_pkg
rpm_speed.launch.py
```

확인

```
$ ros2 node list
$ ros2 param list
$ ros2 param get /speed_calc_node
wheel_radius_param
```