Here, we provide a demo, which uses KDL to calculate forward kinematics and inverse kinematics to make the robot's end effector run in z axis in Cartesian space. Please run the following three commands in the terminal.

ros2   launch   lbr_fri_ros2   app.launch.py   model:=iiwa7

ros2   run   lbr_demos_fri_ros2_cpp   cartesian_pose_node

ros2   run   lbr_demos_fri_ros2_cpp   cartesian_path_planning_node

Tips: please modify 'iiwa7' to your robot name （such as iiwa14, med7, med14）

cartesian_pose_node is used to publish Cartesian Pose of the real robot and receive Cartesian Pose command from other ros nodes.

cartesian_path_planning_node is a demo, which is used to publish Cartesian Pose commands.
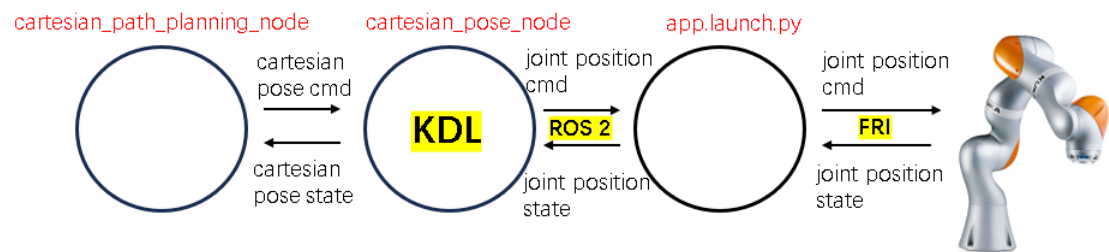
The communication framework is shown in Fig. 1.

Fig. 1