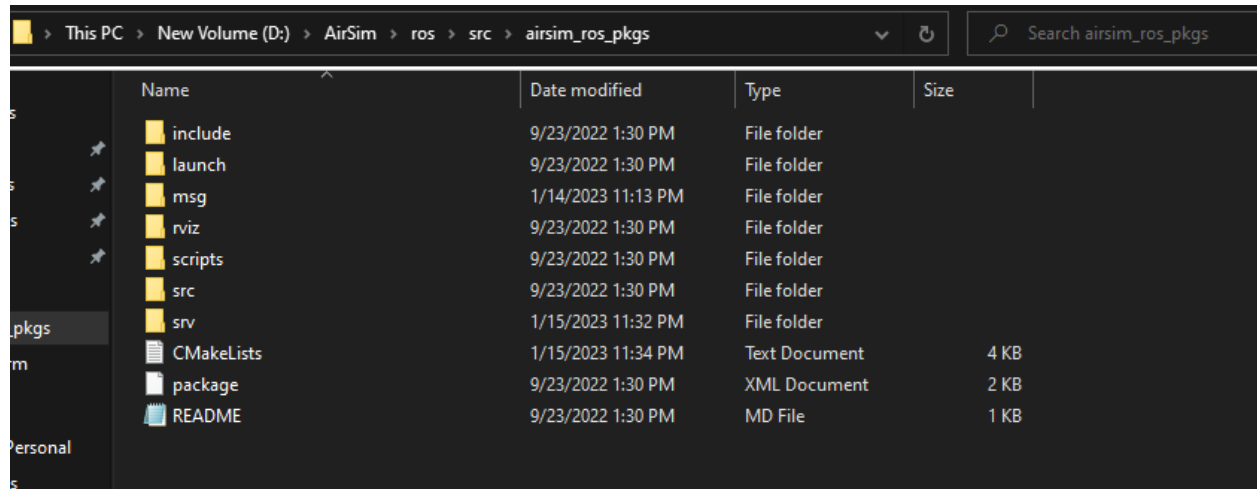


CREATING A CUSTOM SERVICE

Step 1: Add in service file to ROS srv folder in airsim_ros_pkgs (Check picture for directory)

ROS Folder is located within the AirSim folder

Create a .srv file containing your service and add it to the “srv” folder located in airsim_ros_pkgs



Step 2: Add the name of the service file to the CMakeLists.txt file

Within add_service_files in the CMakeLists, add your .srv file name to the list

```
add_service_files(  
  FILES  
    SetGPSPosition.srv  
    Takeoff.srv  
    TakeoffGroup.srv  
    Land.srv  
    LandGroup.srv  
    Reset.srv  
    SetLocalPosition.srv  
    getDroneData.srv  
)  
  
generate_messages(  
  _NAME airsim_msgs  
  _FILES
```

Step 3: Do a catkin in ROS build to bring in the new service file

Go into your Docker terminal

```
cd AirSim  
cd ROS  
catkin build -DCMAKE_C_COMPILER=gcc-8 -DCMAKE_CXX_COMPILER=g++-8
```

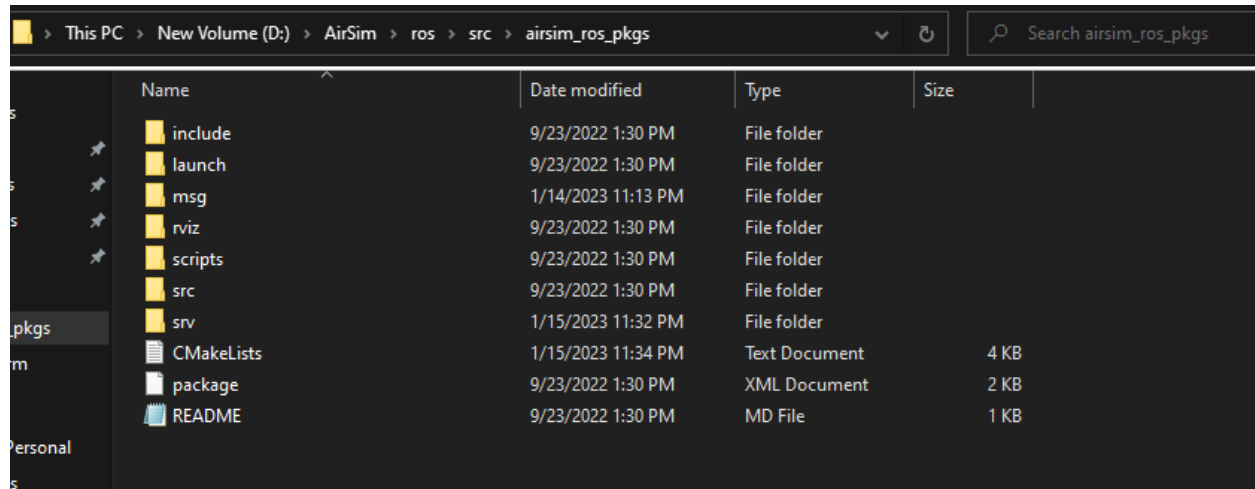
Your changes are now active within AirSim ROS. Your new service is now available.

CREATING A CUSTOM MESSAGE

Step 1: Add in message file to msg folder in airsim_ros_pkgs (Check picture for directory)

ROS Folder is located within the AirSim folder

Create a .msg file containing your message and add it to the “msg” folder in airsim_ros_pkgs



Step 2: Add the name of the message file to the CMakeLists.txt file

Within add_message_files in CMakeList.txt, add your .msg file name

```
add_message_files(  
  FILES  
  GimbalAngleEulerCmd.msg  
  GimbalAngleQuatCmd.msg  
  GPSTYaw.msg  
  VelCmd.msg  
  VelCmdGroup.msg  
  CarControls.msg  
  CarState.msg  
  Altimeter.msg  
  Environment.msg  
  droneData.msg  
)  
add_service_files(  
  FILES
```

Step 3: Do a catkin in ROS build to bring in the new message file

Go into your Docker terminal

```
cd AirSim
```

```
cd ROS
```

```
catkin build -DCMAKE_C_COMPILER=gcc-8 -DCMAKE_CXX_COMPILER=g++-8
```

Your changes are now active within AirSim ROS. Your new message is now available.