

rgb 相机 demo

1. 修改 gazebo.xacro

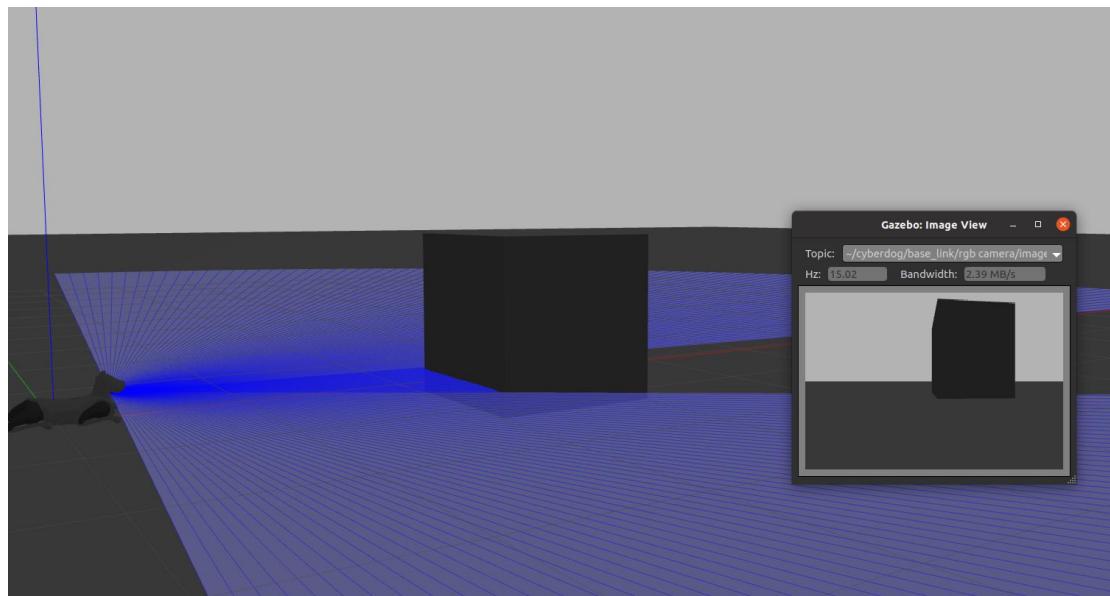
在 gazebo.xacro 中添加并保存

```
PowerShell
<gazebo reference="RGB_camera_link">
    <sensor type="camera" name="rgb camera">
        <always_on>true</always_on>
        <update_rate>15.0</update_rate>
        <camera name="rgb_camera">
            <horizontal_fov>1.46608</horizontal_fov>
            <image>
                <width>320</width>
                <height>180</height>
                <format>R8G8B8</format>
            </image>
            <distortion>
                <k1>0.0</k1>
                <k2>0.0</k2>
                <k3>0.0</k3>
                <p1>0.0</p1>
                <p2>0.0</p2>
                <center>0.5 0.5</center>
            </distortion>
        </camera>
        <plugin name="rgb_camera_plugin"
filename="libgazebo_ros_camera.so">
            <ros>
                <!-- <namespace>stereo</namespace> -->
                <remapping>~/image_raw:=image_raw</remapping>
                <remapping>~/camera_info:=camera_info</remapping>
            </ros>
            <!-- Set camera name. If empty, defaults to sensor
name (i.e. "sensor_name") -->
            <camera_name>rgb_camera</camera_name>
            <!-- Set TF frame name. If empty, defaults to link
name (i.e. "link_name") -->
            <frame_name>RGB_camera_link</frame_name>
```

```
<hack_baseline>0.2</hack_baseline>
</plugin>
</sensor>
</gazebo>
```

2. 运行仿真程序

运行仿真程序后可通过 window->Topic Visualization 中找到对应 topic 并打开, 可确认 rgb 相机正常运行



通过 ros2 echo topic 可确认 topic 正常发送

```
ljh@ljh-Precision-3640-Tower:~/cyberdog_os/cyberdog_sim$ ros2 topic list
/opt/ros/galactic/bin/ros2:6: DeprecationWarning: pkg_resources is deprecated as
an API. See https://setuptools.pypa.io/en/latest/pkg_resources.html
  from pkg_resources import load_entry_point
/apply_force
/clock
 imu
/parameter_events
/performance_metrics
/rgb_camera/camera_info
/rgb_camera/image_raw
/rosout
/scan
/yaml_parameter
```

3. rviz 可视化

在 rviz2 中通过以下设置可将 topic 可视化

