

rgb 相机 demo

1. 修改 gazebo.xacro

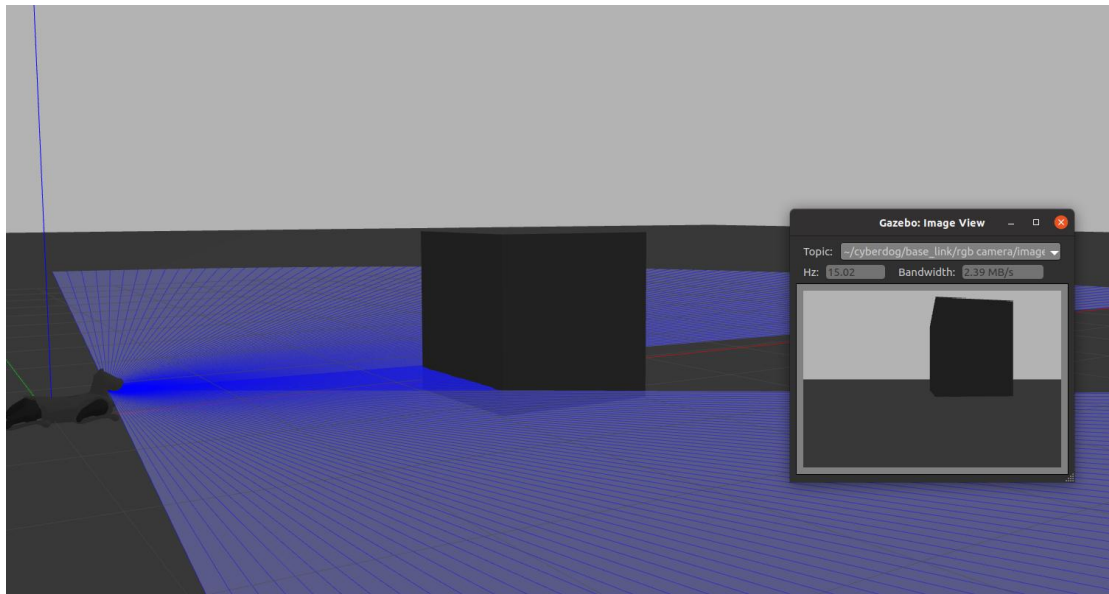
在 gazebo.xacro 中添加并保存

```
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 rivz2 中通过以下设置可将 topic 可视化

