32. View point cloud data

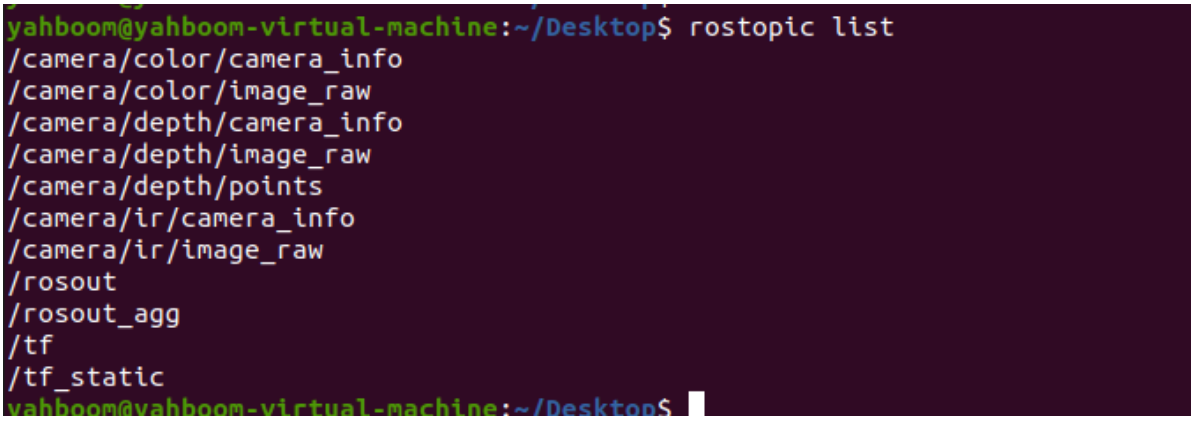
32.1. View depth point cloud

Terminal input,

```
roslaunch orbbec_camera orbbec_camera.launch
```

View topic data,

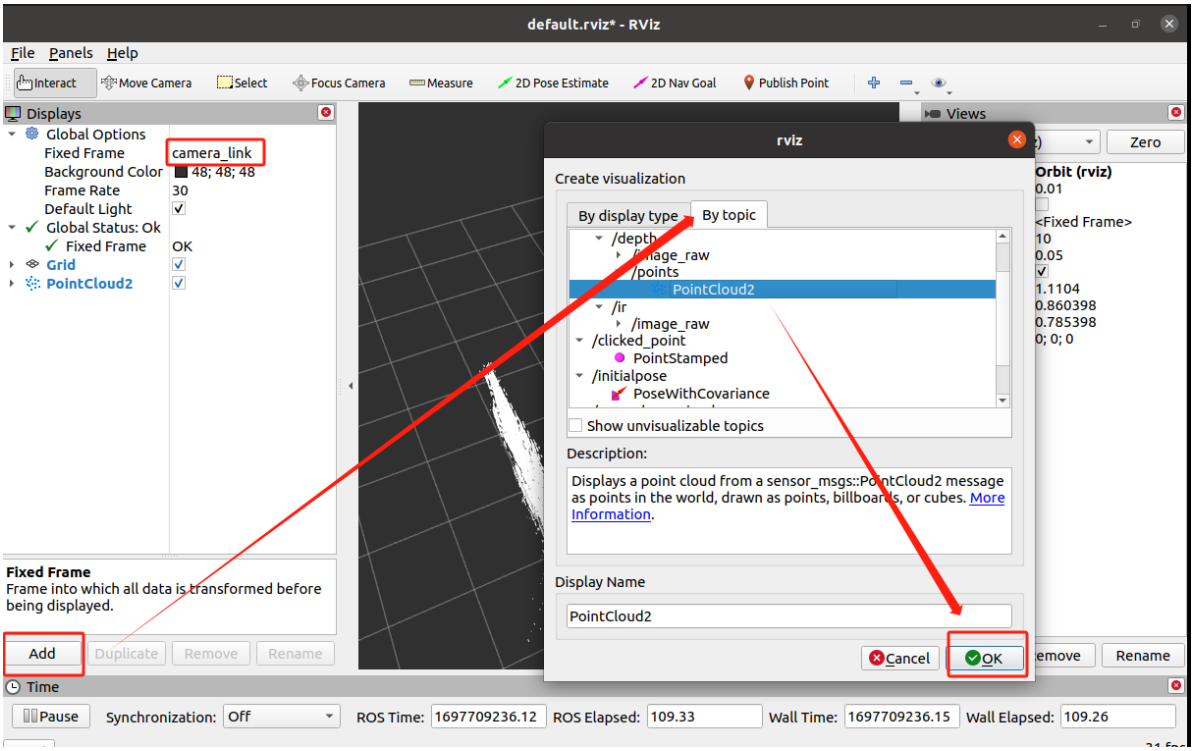
```
rostopic list
```



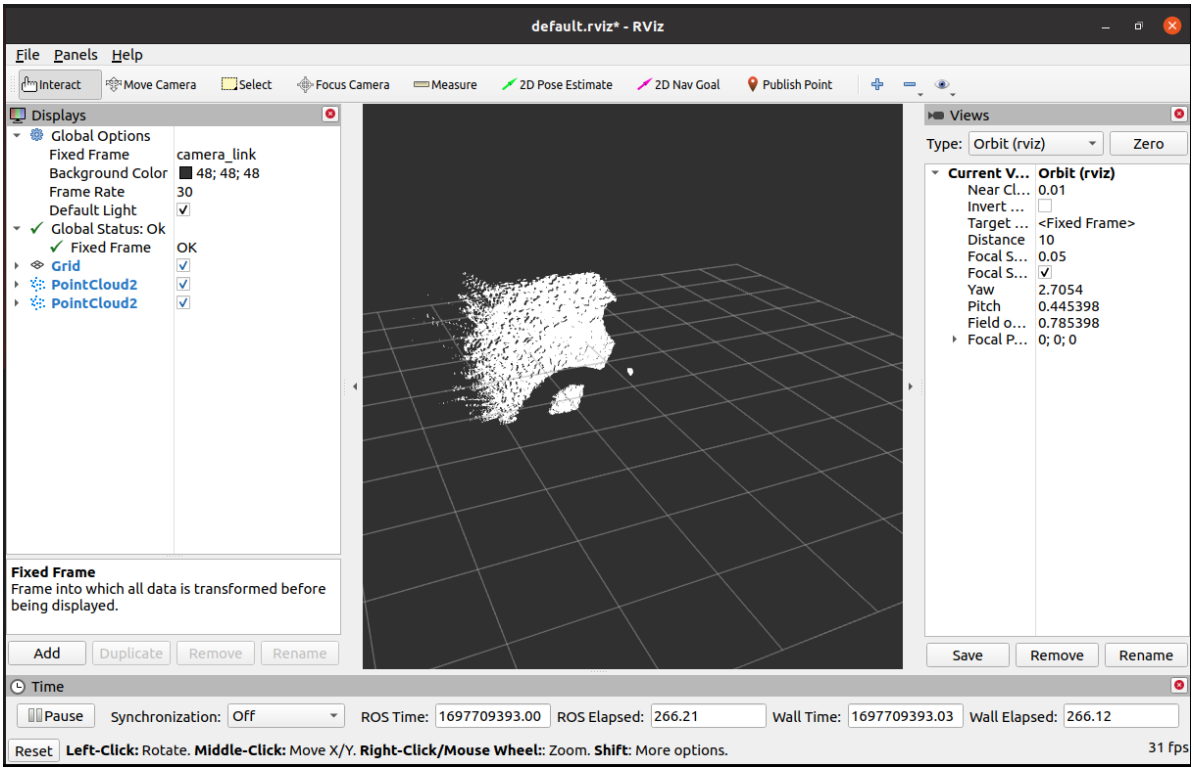
As shown in the picture above, the topic name of depth point cloud is: /camera/depth/points. Open rviz to view the point cloud.

```
rviz
```

After opening, set it as shown below, change Fixed Frame under Global Options to camera_link, then click [Add], select [By topic], select **/depth/points/PointCloud2**, and click OK to complete the setting.



The point cloud displayed is as follows,



32.2. View color point cloud

Start camera

```
roslaunch orbbec_camera orbbec_camera.launch
```

View topics,

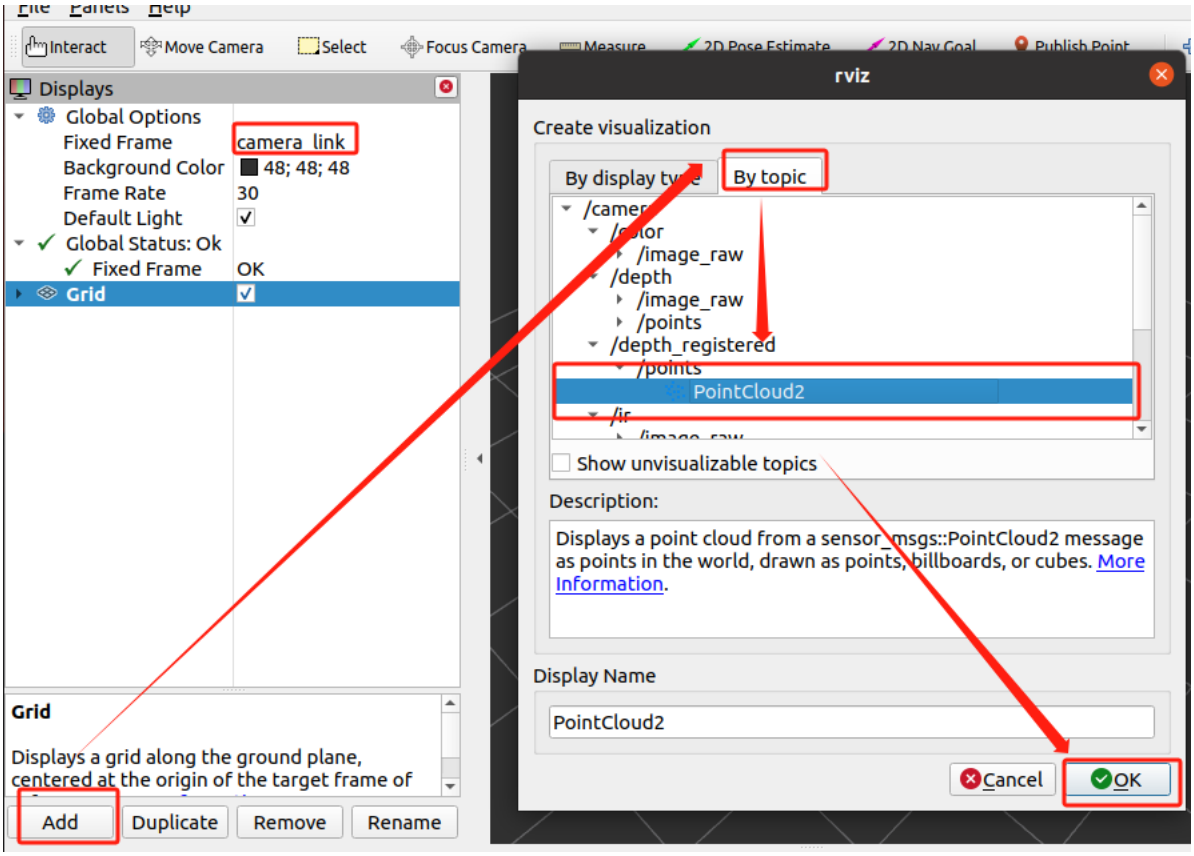
```
rostopic list
```

```
yahboom@yahboom-virtual-machine:~/Desktop$ rostopic list
/camera/color/camera_info
/camera/color/image_raw
/camera/depth/camera_info
/camera/depth/image_raw
/camera/depth/points
/camera/depth_registered/points
/camera/ir/camera_info
/camera/ir/image_raw
/clicked_point
/initialpose
/move_base_simple/goal
/rosout
/rosout_agg
/tf
/tf_static
```

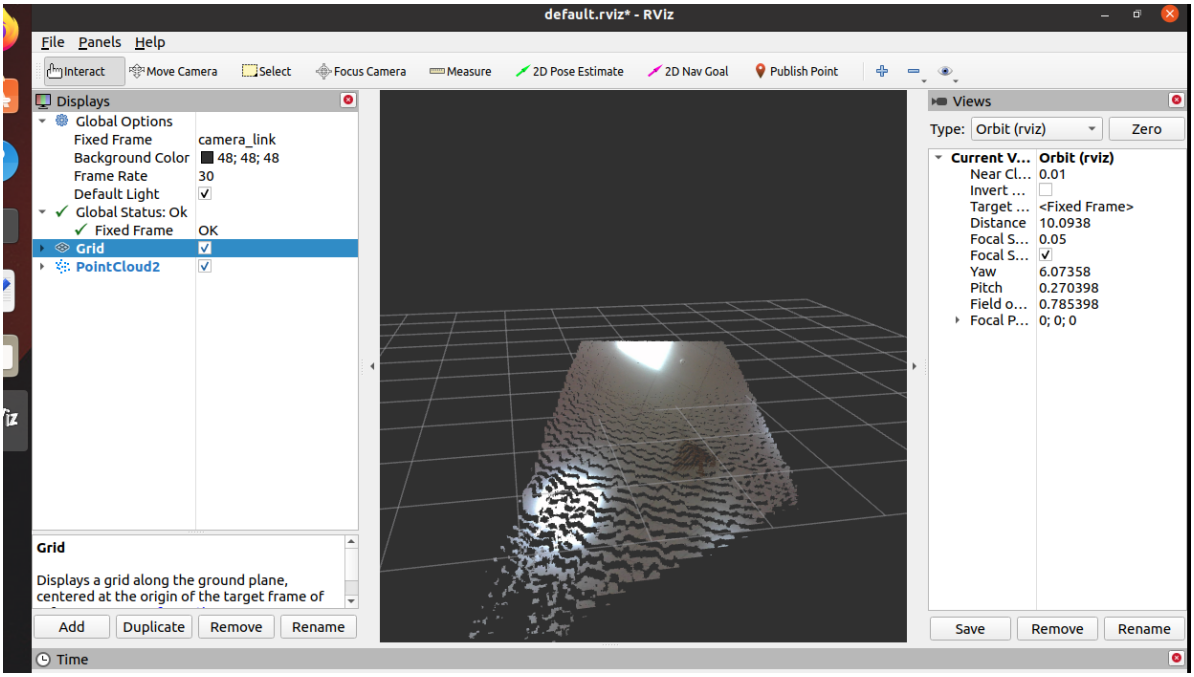
The topic of color point cloud is /camera/depth_registered/points, open rviz to view,

```
rviz
```

After opening rviz, do the same as above, change [Fixed Frame] under [Global Options] to camera_link, then click [Add], select [By topic], here is **/camera/depth_registered/points/PointCloud2** , click OK to complete the setting.



The colored point cloud displayed is as follows,


default.rviz* - RViz
File Panels Help
Interact
Move Camera
Select
Focus Camera
Measure
2D Pose Estimate
2D Nav Goal
Publish Point
Displays
Global Options
Fixed Frame camera_link
Background Color 48; 48; 48
Frame Rate 30
Default Light
Global Status: Ok
Fixed Frame OK
Grid
PointCloud2
Grid
Displays a grid along the ground plane, centered at the origin of the target frame of
Add
Duplicate
Remove
Rename
Views
Type: Orbit (rviz)
Zero
Current V... Orbit (rviz)
Near Cl... 0.01
Invert ...
Target ... <Fixed Frame>
Distance 10.0938
Focal S... 0.05
Focal S...
Yaw 6.07358
Pitch 0.270398
Field o... 0.785398
Focal P... 0; 0; 0
Save
Remove
Rename
Time