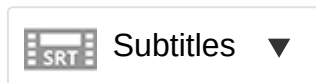
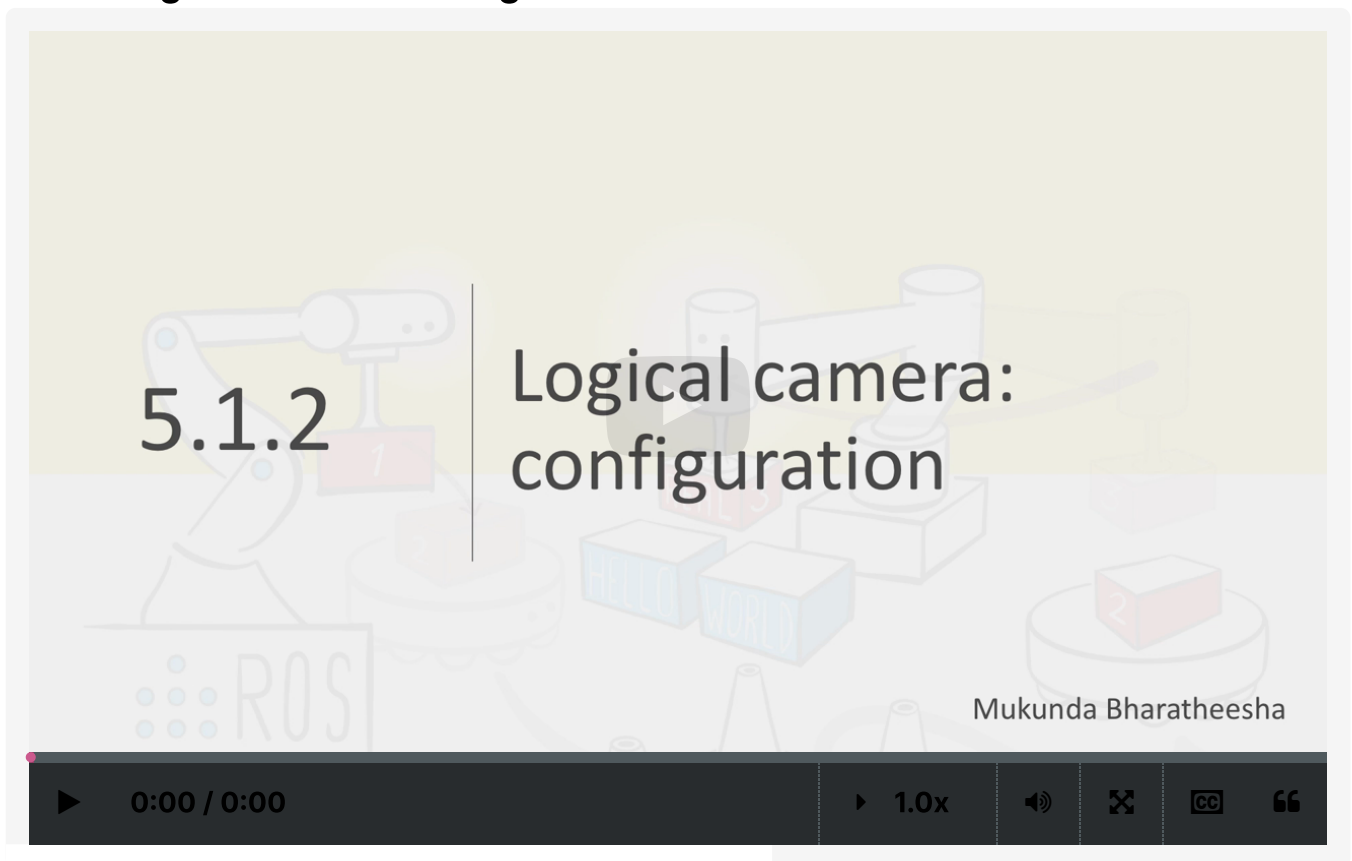


In this lecture, we will learn how to configure a few parameters of the logical camera so we can use the information it provides. You can follow along the instructions in this video in the download files for this week.

This explanation will be useful to complete the Practical Assignments.

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### 5.1.2 Logical camera- configuration



Subtitles (captions) in other languages than provided can be viewed at [YouTube](https://www.youtube.com). Select your language in the CC-button of YouTube

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### Let's explore the hrwros.world file:

- You can find it the hrwros\_gazebo/worlds folder.
- We can see some work is already done for us.
- The conveyor model:

- It has a pose where the first three entries indicate the position of the camera with respect to a fixed reference frame, such as the world.
  - The last three entries indicate the orientation of the camera using the same reference.
  - The orientation is defined using normal Euler1 angles: Roll, Pitch, Yaw. To avoid confusions, we will always provide you these orientations during the course
- 

### Now we go to the `models` folder:

- A model for the `logical_camera` already exists.
    - It has a `model.config`, and a `model.sdf` file.
    - The `.config` files contain administrative information.
    - We explored the `.sdf` files in the video.
- 

### Contents of the `model.sdf` file:

- It has a name unique to the camera. **Different cameras will need different, unique names.**
- The plugin specification simulates the functionality of the camera.
- The namespace is a prefix to the ROS topics published by the logical camera.
- It is also possible to implement camera noise, but we won't use that in this course.
- There is also a **unique link name** like for 'normal' robots in the world.
- Lastly, there is a sensor element, which has a name and a type. **The sensor name should be unique for every camera.** The type on the other hand, can be the same for all cameras.
- These unique names will be used when the topics will be published, so pay attention.

- The sensor element defines all information about the camera properties, such as FOV and aspect ratios.

Remember this explanation as you will need this information for the Practical assignment1.

---

## Question 1

1 point possible (ungraded)

The "robotNameSpace" tag in the sdf model of the logical camera should always have the name of the project we are working on. This is mandatory, otherwise, there will be errors after starting the Gazebo simulation.

☐ True

☐ False

Submit

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## Question 2

1 point possible (ungraded)

In the video, it is shown that the logical camera is left in the "Always on" configuration. Therefore, it keeps publishing the information it sees continuously. Is this generally a good idea?

☐ Yes

☐ No

Submit