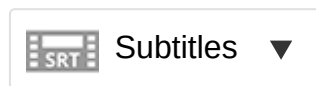
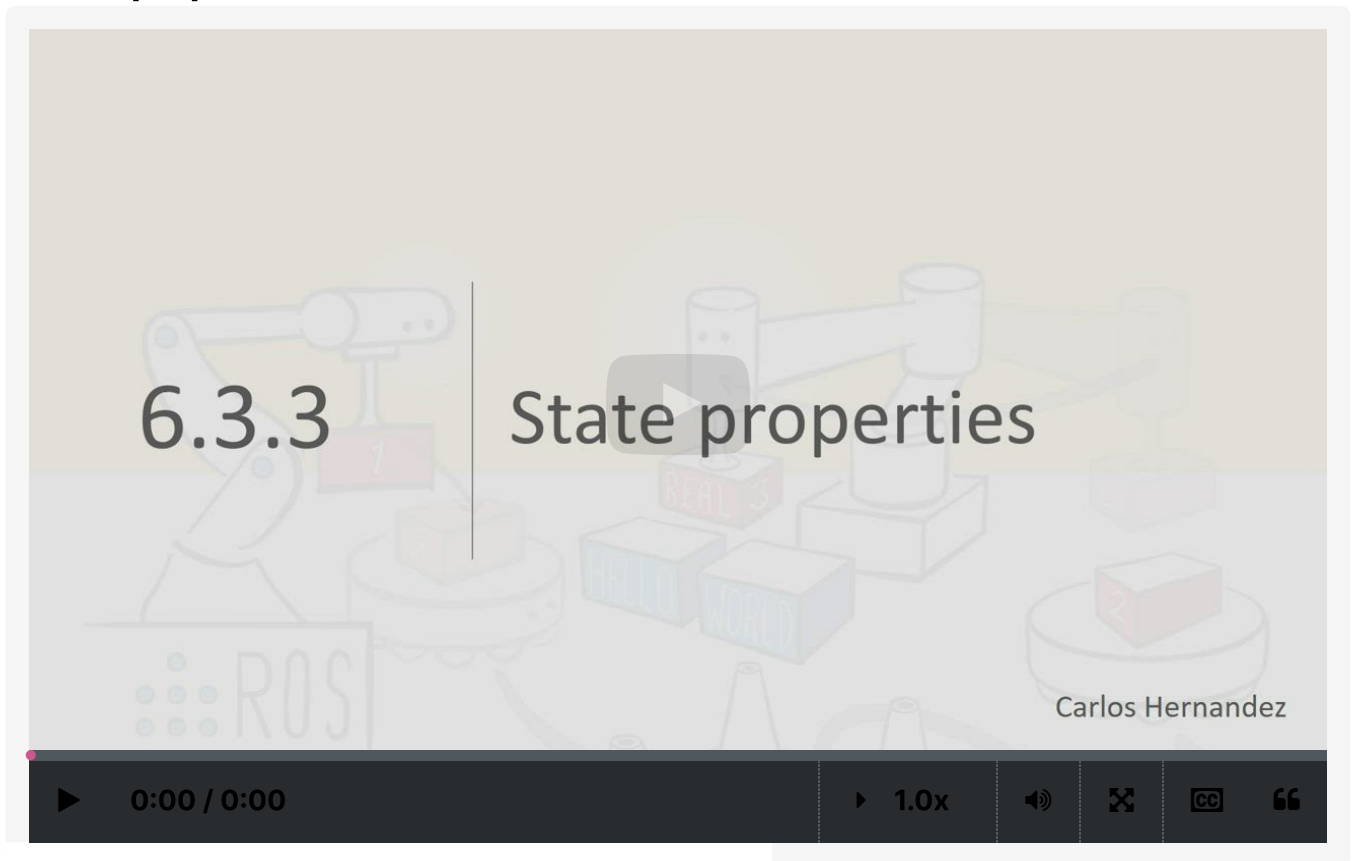


In this lecture, you will understand better what a FlexBE state is and what properties it has to interface with the behavior.

State properties



Some Rights Reserved

Remember

- State encapsulates a single action
- Topics, services and Ros actions provide capabilities

A FlexBE state:

- Represents a specific action

State properties:

- Parameters
 - configure static properties
 - you can give it any value corresponding to a valid ROS type
 - use a behaviour variable
- Input & output keys
 - input key requires data
 - output keys produces data
 - dynamic: can take a different value every state activation
 - values are behaviour userdata variables
- Outcomes
 - possible outcomes
 - possible transitions
 - possible execution flows

Below you will find two figures, figure A and figure B, which will be used for this lecture's question.

Activate Gripper 1

VacuumGripperControlState

State to control any suction gripper in the factory simulation of the MOOC "Hello (Real) World with ROS"

Parameters

enable:

Type: *bool*
'true' to activates the gripper, 'false' to deactivate it

continue:

failed:

Private Configuration

Variables enable easy configuration of constant internal values which are used multiple times. They are read-only and cannot be used in private functions.

names1	=	['robot1_shoulder_pan_joint', 'robot1_gripper_pancake']	
pick1_group	=	'robot1'	
pick2_group	=	'robot2'	
robot1_location	=	Pose2D(x=-0.2, y=2.03, theta=0.0)	
robot2_location	=	Pose2D(x=-8.3, y=-1.4, theta=0.0)	
names2	=	['robot2_shoulder_pan_joint', 'robot2_gripper_pancake']	
gripper1	=	"vacuum_gripper1_suction_cup"	
gripper2	=	"vacuum_gripper2_suction_cup"	

=

Figure A: *Parameter section in FlexBE configuration*

Figure B: *Behavior*

Multiple Choice with Hints and Feedback

1 point possible (ungraded)

Please refer to Figures A and B above.

What value should we set for the parameter `enable` in the figure A, if this state should activate the gripper of robot 1, considering the constant values

defined in the configuration section for this behavior shown in Figure B? Remember that quotation marks are only needed for a literal value of the string type, as a parameter value you can use any Python type.

☐ True

☐ 'gripper2'

☐ '100.0'

Submit