TALOS Training Sessions

Presentation

PAL ROBOTICS

TALOS overview

- Robotics research platform
- ROS capable: state-of-the-art robotic framework
- Autonomy: Self contained robot.
  No external cables needed.

TALOS overview

- Simulation tools: Gazebo & rviz.
  There are no SW changes to test in simulation or in real robot
- Upgrade: Remote updates through the Internet
- Security: Network elements cryptographically protected

Training introduction overview

- TALOS robot package
- Software Development Environment (SDE)
- Software and applications
- Training

TALOS robot package

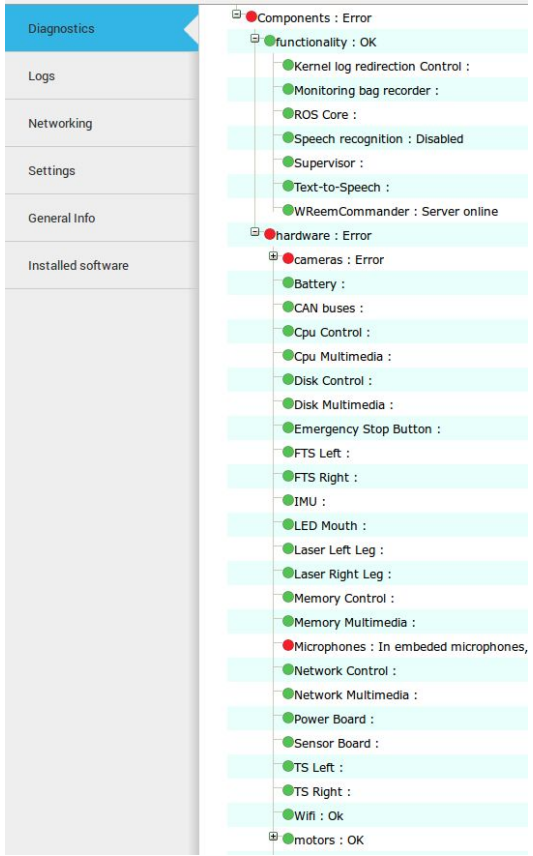
- Biped humanoid robot and crate
- Charger & Joystick
- Access point
- Basestation
- Development computer
- Handbook

Training

- Mechanical
- Electronic
- System administration
- Applications: safety control, joint trajectory, simulation, ros_control and walking

Web Commander

- talos-2c:8080
- Start/Stop applications
- Quick overview of hw/sw status
- Error and diagnose information

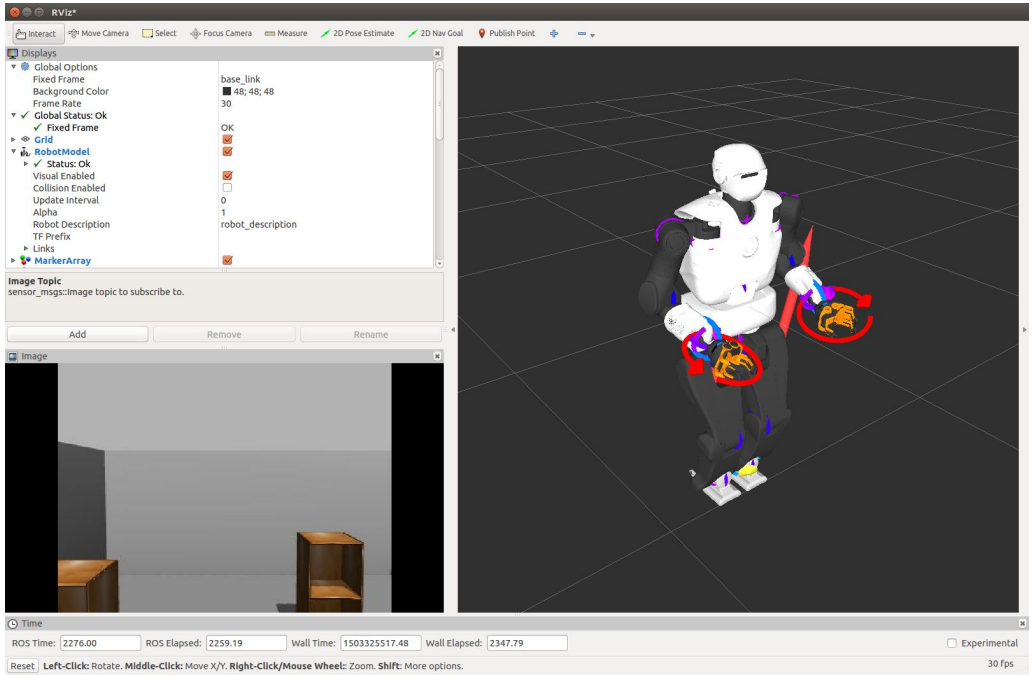


PAL ROBOTICS

TALOS T.S.

Rviz

- Robot model updated with joint states
- 6 axis FT sensors (ankles, wrists)
- Joint torque sensors
- RGBD Camera
- IMU



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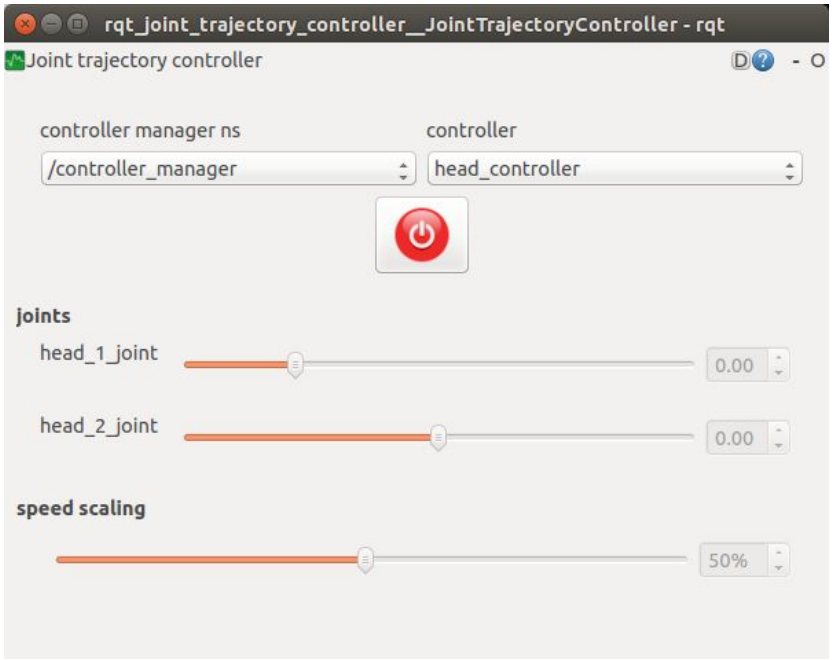
rqt_joint_trajectory_controller

GUI for joint control

- Read joint position
- Moving individual joints
- Test all joints



PAL ROBOTICS

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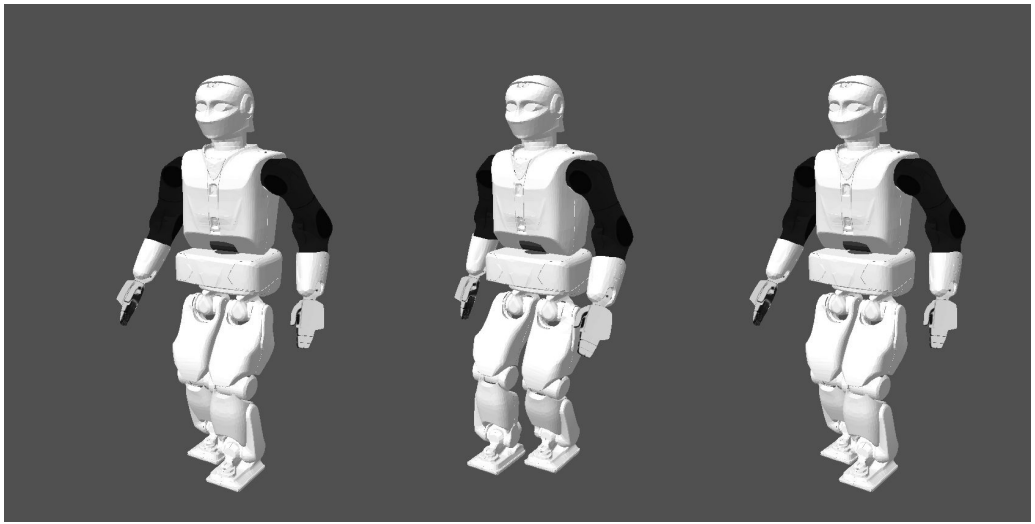
Software and applications

Walking

- Available command interfaces
- Joystick control demo



PAL ROBOTICS