ROS.org

GAZEBO

gazebo_ros_soft_hand.so

initSim

load kinematics
load adaptive transmission
contact topic subscription
register interfaces

update

joint_effort_contact =
    updateKineStatics(joint_position,
        contact_wrenches)

synergy_effort_ =
    jnt_to_act_effort(synergy_position,
        joint_effort_contact)

jnt_effort_cmd =
    act_to_jnt_effrt(synergy_effort,
        joint_position)

URDF

O 19 joints
O 14 mimic joints
O 1 synergy joint

SDF

O 19 joints
O 14 (mimic) joints
O 1 synergy joint

ros_control

O set command
    (position -> effort)

gazebo_api

O readSim
    (position, velocity,
    effort)
O writeSim
    (effort)

adaptive_transmission

O available propagations:
    * actuator -> joint (position, effort)
    * joint -> actuator (position, effort)