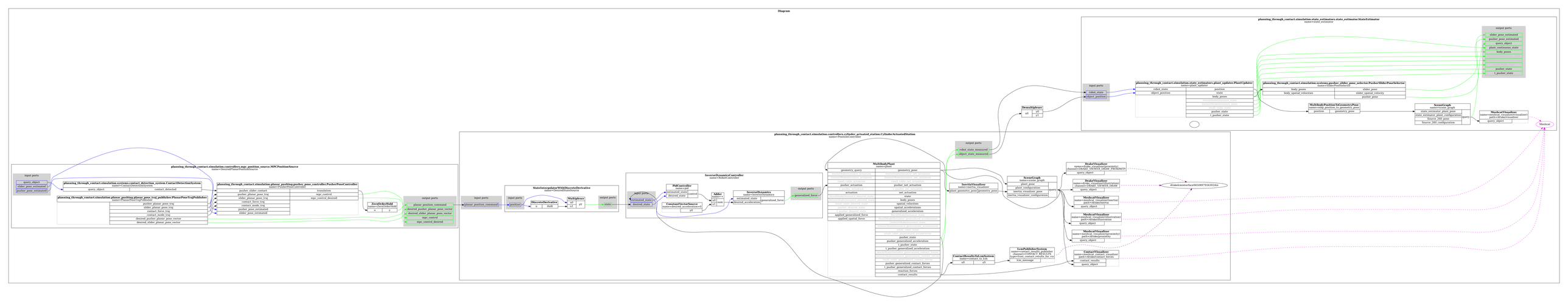

Diagram
planning_through_contact.simulation.controllers.mpc_position_source.MPCPositionSource
name=DesiredPlanarPositionSource
input ports
query_object
slider_pose_estimated
pusher_pose_estimated
planning_through_contact.simulation.systems.contact_detection_system.ContactDetectionSystem
name=ContactDetectionSystem
query_object
contact_detected
planning_through_contact.simulation.planar_pushing.planar_pose_traj_publisher.PlanarPoseTrajPublisher
name=PlanarPoseTrajPublisher
pusher_planar_pose_traj
slider_planar_pose_traj
contact_force_traj
contact_mode_traj
desired_pusher_planar_pose_vector
desired_slider_planar_pose_vector
planning_through_contact.simulation.planar_pushing.pusher_pose_controller.PusherPoseController
name=PusherPoseController
pusher_slider_contact
pusher_planar_pose_traj
slider_planar_pose_traj
contact_force_traj
contact_mode_traj
pusher_pose_estimated
slider_pose_estimated
translation
mpc_control
mpc_control_desired
ZeroOrderHold
name=ZeroOrderHold
u
y
output ports
planar_position_command
desired_pusher_planar_pose_vector
desired_slider_planar_pose_vector
mpc_control
mpc_control_desired
planning_through_contact.simulation.controllers.cylinder_actuated_station.CylinderActuatedStation
name=PositionController
input ports
planar_position_command
StateInterpolatorWithDiscreteDerivative
name=DesiredStateSource
input ports
position
DiscreteDerivative
u
dudt
Multiplexer
u0
u1
y0
output ports
state
InverseDynamicsController
name=RobotController
input ports
estimated_state
desired_state
PidController
name=pid
estimated_state
desired_state
control
ConstantVectorSource
name=desired_acceleration=0
y0
Adder
name=+
u0
u1
sum
InverseDynamics
name=InverseDynamics
estimated_state
desired_acceleration
generalized_force
output ports
generalized_force
MultibodyPlant
name=plant
geometry_query
WorldModelInstance_actuation
DefaultModelInstance_actuation
small_table_actuation
pusher_actuation
t_pusher_actuation
actuation
WorldModelInstance_desired_state
DefaultModelInstance_desired_state
small_table_desired_state
pusher_desired_state
t_pusher_desired_state
applied_generalized_force
applied_spatial_force
geometry_pose
WorldModelInstance_net_actuation
DefaultModelInstance_net_actuation
small_table_net_actuation
pusher_net_actuation
t_pusher_net_actuation
net_actuation
state
body_poses
spatial_velocities
spatial_accelerations
generalized_acceleration
WorldModelInstance_state
WorldModelInstance_generalized_acceleration
DefaultModelInstance_state
DefaultModelInstance_generalized_acceleration
small_table_state
small_table_generalized_acceleration
pusher_state
pusher_generalized_acceleration
t_pusher_state
t_pusher_generalized_acceleration
WorldModelInstance_generalized_contact_forces
DefaultModelInstance_generalized_contact_forces
small_table_generalized_contact_forces
pusher_generalized_contact_forces
t_pusher_generalized_contact_forces
reaction_forces
contact_results
output ports
robot_state_measured
object_state_measured
InertiaVisualizer
name=inertia_visualizer
plant_geometry_pose
geometry_pose
SceneGraph
name=scene_graph
plant_pose
plant_configuration
inertia_visualizer_pose
inertia_visualizer_configuration
query
DrakeVisualizer
name=drake_visualizer(proximity)
channel=DRAKE_VIEWER_DRAW_PROXIMITY
query_object
DrakeVisualizer
name=drake_visualizer(illustration)
channel=DRAKE_VIEWER_DRAW
query_object
drakelcminterface94508979343024in
MeshcatVisualizer
name=meshcat_visualizer(inertia)
path=/drake/inertia
query_object
MeshcatVisualizer
name=meshcat_visualizer(illustration)
path=/drake/illustration
query_object
MeshcatVisualizer
name=meshcat_visualizer(proximity)
path=/drake/proximity
query_object
ContactResultsToLcmSystem
name=contact_to_lcm
u0
y0
LcmPublisherSystem
name=contact_results_publisher
channel=CONTACT_RESULTS
type=lcmt_contact_results_for_viz
lcm_message
ContactVisualizer
name=meshcat_contact_visualizer
path=/drake/contact_forces
contact_results
query_object
Demultiplexer
u0
y0
y1
planning_through_contact.simulation.state_estimators.state_estimator.StateEstimator
name=state_estimator
input ports
robot_state
object_position
planning_through_contact.simulation.state_estimators.plant_updater.PlantUpdater
name=plant_updater
robot_state
object_position
position
state
body_poses
WorldModelInstance_state
DefaultModelInstance_state
small_table_state
pusher_state
t_pusher_state
planning_through_contact.simulation.systems.pusher_slider_pose_selector.PusherSliderPoseSelector
name=SliderPoseSelector
body_poses
body_spatial_velocities
slider_pose
slider_spatial_velocity
pusher_pose
MultibodyPositionToGeometryPose
name=mbp_position_to_geometry_pose
position
geometry_pose
SceneGraph
name=scene_graph
state_estimator_plant_pose
state_estimator_plant_configuration
Source_260_pose
Source_260_configuration
query
MeshcatVisualizer
name=meshcat_visualizer(visualizer)
path=/drake/visualizer
query_object
output ports
slider_pose_estimated
pusher_pose_estimated
query_object
plant_continuous_state
body_poses
WorldModelInstance_state
DefaultModelInstance_state
small_table_state
pusher_state
t_pusher_state
Meshcat