smacc::ISmaccClientBehavior stateMachine_ currentState - currentOrthogonal + ISmaccClientBehavior() + ~ISmaccClientBehavior() + getStateMachine() + getName() + requiresClient() + requiresComponent() + getNode() # runtimeConfigure() # onEntry() # onExit() # postEvent() # postEvent() # getCurrentState() # executeOnEntry() # executeOnExit() # dispose() onOrthogonalAllocation() Δ smacc::SmaccAsyncClientBehavior onEntryThread_ - onExitThread postFinishEventFn postSuccessEventFn smacc::ISmaccUpdatable postFailureEventFn_ onFinished_ periodDuration - onSuccess_ lastUpdate onFailure + ISmaccUpdatable() + onOrthogonalAllocation() + ISmaccUpdatable() + executeUpdate() + ~SmaccAsyncClientBehavior() + onSuccess() + setUpdatePeriod() + onFinished() # update() + onFailure() # executeOnEntry() # executeOnExit() # postSuccessEvent() # postFailureEvent() # dispose() cl_move_group_interface ::CbMoveEndEffectorTrajectory + group + tipLink + allowInitialTrajectoryState JointDiscontinuity # endEffectorTrajectory_ # movegroupClient_ # beahiorMarkers_ - markersPub markersInitialized iksrv - m_mutex postJointDiscontinuityEvent postIncorrectInitialState Event postMotionExecutionFailure **Events** autocleanmarkers + CbMoveEndEffectorTrajectory() + CbMoveEndEffectorTrajectory() + onOrthogonalAllocation() + onEntry() + onExit() + update() # computeJointSpaceTrajectory() # executeJointSpaceTrajectory() # generateTrajectory() # createMarkers() # getCurrentEndEffectorPose() initializeROS() Δ cl_move_group_interface ::CbCircularPouringMotion + angularSpeed rad s + linearSpeed_m_s_ + directionVector + pointerRelativePose # relativePivotPoint_ # deltaHeight # pointerTrajectory_ globalFrame_

+ CbCircularPouringMotion()+ generateTrajectory()+ createMarkers()

computeCurrentEndEffector

PoseRelativeToPivot()