## smacc2::ISmaccClientBehavior - stateMachine\_ - currentState - currentOrthogonal + ISmaccClientBehavior() + ~ISmaccClientBehavior() + getStateMachine() + getName() + requiresClient() + requiresComponent() + onEntry() + onExit() + executeOnEntry() + executeOnExit() # runtimeConfigure() # postEvent() # postEvent() # getCurrentState() # dispose() getNode() # getLogger() onOrthogonalAllocation() smacc2::SmaccAsyncClient Behavior onEntryThread\_ - onExitThread\_ postFinishEventFn\_ postSuccessEventFn postFailureEventFn - onFinished\_ - onSuccess\_ - onFailure\_ - isShutdownRequested smacc2::ISmaccUpdatable + onOrthogonalAllocation() periodDuration\_ + ~SmaccAsyncClientBehavior() lastUpdate\_ + onSuccess() ISmaccUpdatable() + onFinished() ISmaccUpdatable() + onFailure() executeUpdate() + requestForceFinish() setUpdatePeriod() + executeOnEntry() update() + executeOnExit() + waitOnEntryThread() + onSuccess() + onFinished() + onFailure() # postSuccessEvent() # postFailureEvent() # dispose() # isShutdownRequested() waitFutureIfNotFinished() cl\_moveit2z::CbMoveEndEffector Trajectory + group\_ + tipLink\_ + allowInitialTrajectoryState JointDiscontinuity\_ # endEffectorTrajectory\_ # movegroupClient\_ # beahiorMarkers\_ - markersPub\_ - markersInitialized\_ iksrv\_ - m\_mutex\_ postJointDiscontinuityEvent postIncorrectInitialState postMotionExecutionFailure **Events** autocleanmarkers + CbMoveEndEffectorTrajectory() + CbMoveEndEffectorTrajectory() + onOrthogonalAllocation() + onEntry() + onExit() + update() # computeJointSpaceTrajectory() # executeJointSpaceTrajectory() # generateTrajectory() # createMarkers() # getCurrentEndEffectorPose() - initializeROS() cl\_moveit2z::CbCircularPouring Motion + angularSpeed\_rad\_s\_ cl\_moveit2z::CbUndoLastTrajectory + linearSpeed\_m\_s\_ cl\_moveit2z::CbMoveCartesian Relative2 + directionVector\_ backIndex\_ cl\_moveit2z::CbExecuteLast Trajectory + offset\_ + pointerRelativePose\_ trajectory + linearSpeed\_m\_s\_ # relativePivotPoint\_ reversed + CbExecuteLastTrajectory() globalFrame\_ # deltaHeight\_ CbUndoLastTrajectory() + ~CbExecuteLastTrajectory() + CbMoveCartesianRelative2() # pointerTrajectory\_ CbUndoLastTrajectory() + CbMoveCartesianRelative2() + generateTrajectory() - globalFrame\_ ~CbUndoLastTrajectory() + onEntry() + ~CbMoveCartesianRelative2() + CbCircularPouringMotion() onEntry() + generateTrajectory() + generateTrajectory() generateTrajectory() + createMarkers() compute Current End EffectorPoseRelativeToPivot()

cl\_moveit2z::CbCircularPivot

Motion

+ angularSpeed\_rad\_s\_

+ linearSpeed\_m\_s\_

+ relativeInitialPose

+ CbCircularPivotMotion()

+ CbCircularPivotMotion()

+ CbCircularPivotMotion()

- computeCurrentEndEffector

cl\_moveit2z::CbEndEffector Rotate

+ CbEndEffectorRotate()+ ~CbEndEffectorRotate()

PoseRelativeToPivot()

+ generateTrajectory()

+ createMarkers()

+ tipLink

+ onEntry()

# planePivotPose\_

# deltaRadians