## stateMachine currentState currentOrthogonal + ISmaccClientBehavior() + ~ISmaccClientBehavior() + getStateMachine() + getName() + requiresClient() + requiresComponent() + getNode() # runtimeConfigure() # onEntry() # onExit() # postEvent() # postEvent() # getCurrentState() # executeOnEntry() # executeOnExit() # dispose() - onOrthogonalAllocation() Д smacc::SmaccAsyncClientBehavior - on Entry Thread\_ onExitThread\_ - postFinishEventFn postSuccessEventFn smacc::ISmaccUpdatable postFailureEventFn\_ onFinished\_ periodDuration - onSuccess lastUpdate onFailure + ISmaccUpdatable() + onOrthogonalAllocation() + ISmaccUpdatable() + ~SmaccAsyncClientBehavior() + executeUpdate() + 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() cl\_move\_group\_interface ::CbCircularPivotMotion + angularSpeed\_rad\_s\_ + linearSpeed\_m\_s + relativeInitialPose # planePivotPose # deltaRadians + CbCircularPivotMotion() + CbCircularPivotMotion() + CbCircularPivotMotion() + generateTrajectory() + createMarkers() computeCurrentEndEffector PoseRelativeToPivot() Д cl\_move\_group\_interface ::CbEndEffectorRotate

+ CbEndEffectorRotate()+ ~CbEndEffectorRotate()

+ onEntry()

smacc::ISmaccClientBehavior