Class diagram (UML)

int

type_info *

std::enable_shared_from_this< SmaccStateInfo >

map<

shared_ptr<

vector<

string

+depth_
+stateIndex_

+tid_

+eventGeneratorsInfo_
+stateReactorsInfo_
+staticBehaviorInfo_

+parentState_
+stateMachine_

+children_
+transitions_

+demangledStateName
+fullStateName

smacc2::introspection::SmaccStateInfo

+ SmaccStateInfo()
+ getStateLevel()
+ depth()
+ getAncestors()
+ getFullPath()
+ createChildState()
+ declareTransition()
+ toShortName()
+ getDemangledFullName()
+ getNode()
+ getLogger()

SharedPtr

#eventGenerators_
#stateReactors_

#logger_

#stateInfo_

#currentStateInfo_
#stateMachineInfo_

#node_

-transitionLogHistory_

smacc2::ISmaccState

+ getStateMachine()
+ getName()
+ getParentState()
+ getNode()
+ getLogger()
+ getClassName()
+ configure()
+ requiresComponent()
+ requiresClient()
+ setGlobalSMData()
+ getGlobalSMData()
+ createStateReactor()
+ createStateReactor()
+ createEventGenerator()
+ postEvent()
+ postEvent()
+ notifyTransition()
+ notifyTransitionFromTransitionTypeInfo()
+ getStateReactors()
+ getEventGenerators()
+ getOrthogonal()
+ getEventGenerator()
+ getStateReactor()

SharedPtr **Service<** **SmaccStatus** **recursive_mutex** **StateMachineInternalAction** **list<** **SMRunMode** **long** **Publisher<**

#clients_
-clientBehaviors_

-updatableClients_
updatableStateElements_

#parentState_

#orthogonals_
-globalData_

#currentState_ #timer_ #transitionHistoryService_ #status_msg_ -eventQueueMutex_ -m_mutex_ -stateMachineCurrentAction -stateCallbackConnections #nh_ -runMode_ -stateSeqCounter_

#stateMachinePub_
#stateMachineStatusPub_

#transitionLogPub_

smacc2::ISmaccStateMachine

+ ISmaccStateMachine()
+ ~ISmaccStateMachine()
+ reset()
+ stop()
+ eStop()
+ getOrthogonal()
+ getOrthogonals()
+ requiresComponent()
+ postEvent()
+ postEvent()
+ getGlobalSMData()
+ setGlobalSMData()
+ mapBehavior()
+ getStateMachineName()
+ state_machine_visualization()
+ getCurrentStateInfo()
+ publishTransition()
+ onInitialize()
+ getTransitionLogHistory()
+ createSignalConnection()
+ notifyOnStateEntryStart()
+ notifyOnStateEntryEnd()
+ notifyOnRuntimeConfigured()
+ notifyOnStateExiting()
+ notifyOnStateExited()
+ disposeStateAndDisconnectSignals()
+ notifyOnRuntimeConfigurationFinished()
+ getCurrentStateCounter()
+ getCurrentState()
+ getStateMachineInfo()
+ buildStateMachineInfo()
+ getNode()
+ getLogger()
+ getMutex()
# checkStateMachineConsistence()
# initializeROS()
# onInitialized_
# createOrthogonal()
- propagateEventToStateReactors()
- updateStatusMessage()

atomic< **double** **SmaccFifoScheduler *** **processor_handle** **thread**

-groupName_

-statusPub_

-signalDetector_ -smaccStateMachine_

-end_
-initialized_
-lastState_

-loop_rate_hz -scheduler_ -processorHandle_ -signalDetectorThread_

smacc2::ISmaccOrthogonal

+ setStateMachine()
+ getStateMachine()
+ addClientBehavior()
+ runtimeConfigure()
+ onEntry()
+ onExit()
+ getName()
+ requiresComponent()
+ requiresClient()
+ getClients()
+ getClientBehaviors()
+ setGlobalSMData()
+ getGlobalSMData()
+ getClientBehavior()
+ getNode()
+ getLogger()
# onInitialize()
# initializeClients()
# assignClientToOrthogonal()

smacc2::SignalDetector

+ SignalDetector()
+ initialize()
+ setProcessorHandle()
+ runThread()
+ join()
+ stop()
+ pollingLoop()
+ pollOnce()
+ postEvent()
+ getNode()
+ getLogger()
- findUpdatableClientsAndComponents()
- findUpdatableStateElements()

smacc2::ISmaccClientBehavior

+ ISmaccClientBehavior()
+ ~ISmaccClientBehavior()
+ getStateMachine()
+ getName()
+ requiresClient()
+ requiresComponent()
# runtimeConfigure()
# onEntry()
# onExit()
# postEvent()
# postEvent()
# getCurrentState()
# dispose()
# getNode()
# getLogger()
- executeOnEntry()
- executeOnExit()
- onOrthogonalAllocation()

smacc2::ISmaccClient

+ ISmaccClient()
+ ~ISmaccClient()
+ onInitialize()
+ getName()
+ getComponent()
+ getComponent()
+ getComponent()
+ getType()
+ getStateMachine()
+ connectSignal()
+ requiresClient()
+ getComponents()
+ postEvent()
+ postEvent()
# onOrthogonalAllocation()
# createComponent()
# createNamedComponent()
# getNode()
# getLogger()
- initialize()
- setStateMachine()
- setOrthogonal()

future< **SmaccSignal<** **bool** **function<** **SmaccSignal<**

+moveGroupClientInterface
+planningSceneInterface

+jointValueTarget_

-onEntryThread_
-onExitThread_

-onFailure_
-onFinished_
-onSuccess_

-isShutdownRequested_

-postFailureEventFn_
-postFinishedEventFn_
-postSuccessEventFn_

-postEventMotionExecutionFailed_
-postEventMotionExecutionSucceded_

-onFailed_
-onSucceded_

smacc2::SmaccAsyncClientBehavior

+ onOrthogonalAllocation()
+ ~SmaccAsyncClientBehavior()
+ onSuccess()
+ onFinished()
+ onFailure()
# postSuccessEvent()
# postFailureEvent()
# dispose()
# isShutdownRequested()
- waitFutureIfNotFinished()
- executeOnEntry()
- executeOnExit()

cl_move_group_interface::ClMoveGroup

+ ClMoveGroup()
+ ~ClMoveGroup()
+ onInitialize()
+ postEventMotionExecutionSucceded()
+ postEventMotionExecutionFailed()
+ onOrthogonalAllocation()
+ onMotionExecutionSucceded()
+ onMotionExecutionFailed()

optional<

+group_
+scalingFactor_

#movegroupClient_

cl_move_group_interface::CbMoveJoints

+ CbMoveJoints()
+ CbMoveJoints()
+ onEntry()
+ onExit()
# moveJoints()

-backIndex_

cl_move_group_interface::CbMoveLastTrajectoryInitialState

+ CbMoveLastTrajectoryInitialState()
+ CbMoveLastTrajectoryInitialState()
+ ~CbMoveLastTrajectoryInitialState()
+ onEntry()