map< const std::type map< const std::type map< const std::type info \*, std::vector vector< std::shared \_info \*, std::vector shared\_ptr< smacc:: int std::enable shared info \*, std::vector vector< smacc::introspection shared ptr< smacc:: ptr< smacc::introspection string type\_info \* < std::shared ptr< smacc < std::shared\_ptr< smacc introspection::SmaccStateMachine introspection::SmaccStateInfo > \_from\_this < SmaccStateInfo > < smacc::introspection</pre> ::SmaccTransitionInfo > ::SmaccStateInfo > > ::introspection::SmaccEventGenerator ::introspection::SmaccStateReactor Info > ::ClientBehaviorInfoEntry > > Info > > > Info > > > +fullStateName +stateIndex +children\_ +tid\_ +eventGeneratorsInfo \ +staticBehaviorInfo +stateReactorsInfo +parentState +transitions\_ +stateMachine\_ +demangledStateName +depth\_ smacc::introspection ::SmaccStateInfo vector< std::shared vector< std::shared + SmaccStateInfo() NodeHandle \_ptr< smacc::SmaccEventGenerator > > \_ptr< smacc::StateReactor > > + getStateLevel() + depth() + getAncestors() + getFullPath() + createChildState() + declareTransition() + toShortName() + getDemangledFullName() #contextNh #stateReactors\_ -stateMachineInfo\_ #eventGenerators\_ \ #stateInfo\_ #currentStateInfo\_ smacc::ISmaccState + getStateMachine() + getParentState() + getROSNode() + getClassName() + configure() + requiresComponent() + requiresClient() + getGlobalSMData() map< std::string, std map< std::string, std + setGlobalSMData() ::pair< std::function list< boost::signals2 vector< smacc\_msgs SMRunMode Publisher ::shared\_ptr< smacc:: StateMachineInternalAction Timer SmaccStatus ServiceServer unsigned long recursive\_mutex ::SmaccTransitionLogEntry > + createStateReactor() < std::string()>, boost ::connection > ISmaccOrthogonal > > #private nh + createStateReactor() ::any > > #parentState\_ #nh\_ + createEventGenerator() + postEvent() + postEvent() + notifyTransition() + notifyTransitionFromTransition TypeInfo() + getStateReactors() + getEventGenerators() + getParam() + setParam() + param() + getOrthogonal() + getEventGenerator() + getStateReactor() #transitionLogPub\_ #stateMachineStatusPub -eventQueueMutex\_ #currentState -globalData\_ #orthogonals\_ -stateCallbackConnections -runMode\_ -transitionLogHistory\_ \ #transitionHistoryService\_ | -stateSeqCounter\_ -stateMachineCurrentAction #status\_msg\_ -m\_mutex\_ #stateMachinePub\_ smacc::ISmaccStateMachine + ISmaccStateMachine() + ~ISmaccStateMachine() + reset() + stop() + eStop() + getOrthogonal() + getOrthogonals() + requiresComponent() + postEvent() + postEvent() + getTransitionLogHistory() + getGlobalSMData() + setGlobalSMData() + mapBehavior() + getStateMachineName() + state machine visualization() + getCurrentStateInfo() boost::statechart:: + publishTransition() asynchronous\_state\_machine double SmaccFifoScheduler \* vector< smacc::ISmaccUpdatable \* > thread processor\_handle atomic< bool > atomic< unsigned long > < DerivedStateMachine, InitialState + onInitialize() + getTransitionLogHistory() + createSignalConnection() + notifyOnStateEntryStart() Type, SmaccFifoScheduler, SmaccAllocator > -statusPub\_ + notifyOnStateEntryEnd() + notifyOnRuntimeConfigured() + notifyOnStateExitting() + notifyOnStateExited() + notifyOnRuntimeConfiguration Finished() + getCurrentStateCounter() + getCurrentState() + getStateMachineInfo() + buildStateMachineInfo() # checkStateMachineConsistence() # initializeROS() # onInitialized() # createOrthogonal() # getParam() # setParam() # param() lockStateMachine() unlockStateMachine() propagateEventToStateReactors() - updateStatusMessage() -updatableClients\_ -initialized\_ -signalDetectorThread -signalDetector\_ \ -processorHandle\_ | -scheduler -lastState\_ -loop\_rate\_hz -smaccStateMachine\_ -updatableStateElements smacc::SignalDetector smacc::SmaccStateMachine Base < Derived State Machine, + SignalDetector() InitialStateType > boost::statechart:: + initialize() asynchronous\_state\_machine < SmFerrari, MsRun, SmaccFifoScheduler, + setProcessorHandle() + runThread() SmaccAllocator > + SmaccStateMachineBase() + join() + ~SmaccStateMachineBase() + stop() + reset() + pollingLoop() + stop() + pollOnce() + eStop() + postEvent() + initiate\_impl() findUpdatableClients() - findUpdatableStateElements() < SmFerrari, MsRun > smacc::SmaccStateMachine Base < SmFerrari, MsRun > + SmaccStateMachineBase() + ~SmaccStateMachineBase() + reset() + stop() + eStop() + initiate\_impl() sm\_ferrari::SmFerrari

+ onInitialize()