

Package: rho.agent (via r-universe)

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Type Package

Depends R (>= 4.4.0)

Title Rho Async Agent Core

Version 0.0.1.9000

Description Implements the asynchronous multi-turn agent loop over the Rho AI protocol, including ordered lifecycle events, steering and follow-up queues, cancellation, and typed scheduling of concurrent tool calls.

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Imports S7, s7contract, rho.async (>= 0.0.1.9000), rho.ai (>= 0.0.1.9000), nanonext, coro, promises

Suggests tinytest, knitr, rho.http (>= 0.0.1.9000), yyjsonr

Remotes soundkou-bioinfo/Rho/packages/rho.async,
soundkou-bioinfo/Rho/packages/rho.http,
soundkou-bioinfo/Rho/packages/rho.ai

URL <https://github.com/soundkou-bioinfo/Rho>,
<https://soundkou-bioinfo.github.io/Rho/rho.agent/>

BugReports <https://github.com/soundkou-bioinfo/Rho/issues>

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Repository <https://soundkou-bioinfo.r-universe.dev>

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Contents

rho_agent_contracts	2
rho_compaction_contracts	2
Index	3

rho_agent_contracts	<i>Agent state machine, policy, scheduling, and lifecycle events</i>
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Description

rho_prompt() and rho_continue() return tasks. The agent consumes typed assistant events, schedules tool tasks, preserves source-order results, and emits typed lifecycle events. Steering and follow-up queues have separate, typed draining policies.

Details

Policy and scheduling decisions are S7 generics. Packages can specialize context transformation, before/after-tool behavior, next-turn preparation, assistant event reduction, queue draining, and tool batch execution without replacing the core loop.

rho_compaction_contracts	<i>Session context and compaction contracts</i>
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Description

The session transcript is append-only. Message entries retain the complete interaction, while rho_build_agent_context() projects the active provider context through the latest compaction entry and any explicit exclusions.

Details

rho_compact() prepares a stable cut point, runs an asynchronous compactor, appends a semantic checkpoint, and invokes before/after policy methods. Automatic threshold compaction and one bounded provider-input recovery use the same protocol. Applications can supply another RhoCompactor class or specialize the public generics without replacing the agent loop.

Index

AgentEventListener
 (rho_agent_contracts), 2
AgentPolicy (rho_agent_contracts), 2

rho_abort_agent (rho_agent_contracts), 2
rho_after_compaction
 (rho_compaction_contracts), 2
rho_after_tool_call
 (rho_agent_contracts), 2
rho_after_tool_call_decision
 (rho_agent_contracts), 2
rho_agent (rho_agent_contracts), 2
rho_agent_contracts, 2
rho_agent_error (rho_agent_contracts), 2
rho_append_session_entry
 (rho_compaction_contracts), 2
rho_before_compaction
 (rho_compaction_contracts), 2
rho_before_compaction_decision
 (rho_compaction_contracts), 2
rho_before_tool_call
 (rho_agent_contracts), 2
rho_before_tool_call_decision
 (rho_agent_contracts), 2
rho_build_agent_context
 (rho_compaction_contracts), 2
rho_build_agent_context(), 2
rho_compact (rho_compaction_contracts),
 2
rho_compact(), 2
rho_compact_preparation
 (rho_compaction_contracts), 2
rho_compaction_contracts, 2
rho_compaction_cut_allowed
 (rho_compaction_contracts), 2
rho_compaction_message_cut_allowed
 (rho_compaction_contracts), 2
rho_compaction_result
 (rho_compaction_contracts), 2

rho_compaction_settings
 (rho_compaction_contracts), 2
rho_compaction_text
 (rho_compaction_contracts), 2
rho_completed_tool_context
 (rho_agent_contracts), 2
rho_context_usage
 (rho_compaction_contracts), 2
rho_continue (rho_agent_contracts), 2
rho_continue(), 2
rho_emit_agent_event
 (rho_agent_contracts), 2
rho_error_requests_compaction
 (rho_compaction_contracts), 2
rho_estimate_tokens
 (rho_compaction_contracts), 2
rho_execute_tool_batch
 (rho_agent_contracts), 2
rho_follow_up (rho_agent_contracts), 2
rho_handle_agent_event
 (rho_agent_contracts), 2
rho_next_turn_decision
 (rho_agent_contracts), 2
rho_prepare_compaction
 (rho_compaction_contracts), 2
rho_prepare_next_turn
 (rho_agent_contracts), 2
rho_project_session_entry
 (rho_compaction_contracts), 2
rho_prompt (rho_agent_contracts), 2
rho_prompt(), 2
rho_reduce_assistant_event
 (rho_agent_contracts), 2
rho_reset (rho_agent_contracts), 2
rho_resolve_tool_execution
 (rho_agent_contracts), 2
rho_run_context (rho_agent_contracts), 2
rho_should_compact
 (rho_compaction_contracts), 2

rho_state_entries
 (rho_compaction_contracts), 2
 rho_state_messages
 (rho_agent_contracts), 2
 rho_steer (rho_agent_contracts), 2
 rho_subscribe (rho_agent_contracts), 2
 rho_take_agent_queue
 (rho_agent_contracts), 2
 rho_tool_context (rho_agent_contracts),
 2
 rho_transform_agent_context
 (rho_agent_contracts), 2
 rho_wait_for_idle
 (rho_agent_contracts), 2
 RhoAfterCompactionContext
 (rho_compaction_contracts), 2
 RhoAfterToolCallDecision
 (rho_agent_contracts), 2
 RhoAgent (rho_agent_contracts), 2
 RhoAgentEndEvent (rho_agent_contracts),
 2
 RhoAgentErrorValue
 (rho_agent_contracts), 2
 RhoAgentEvent (rho_agent_contracts), 2
 RhoAgentOptions (rho_agent_contracts), 2
 RhoAgentPolicy (rho_agent_contracts), 2
 RhoAgentRunResult
 (rho_agent_contracts), 2
 RhoAgentSettledEvent
 (rho_agent_contracts), 2
 RhoAgentStartEvent
 (rho_agent_contracts), 2
 RhoAllQueue (rho_agent_contracts), 2
 RhoAssistantResponse
 (rho_agent_contracts), 2
 RhoAssistantTurn (rho_agent_contracts),
 2
 RhoBeforeCompactionContext
 (rho_compaction_contracts), 2
 RhoBeforeCompactionDecision
 (rho_compaction_contracts), 2
 RhoBeforeToolCallDecision
 (rho_agent_contracts), 2
 RhoCompactionBusy
 (rho_compaction_contracts), 2
 RhoCompactionCancelled
 (rho_compaction_contracts), 2
 RhoCompactionCheckpoint
 (rho_compaction_contracts), 2
 RhoCompactionCut
 (rho_compaction_contracts), 2
 RhoCompactionEndEvent
 (rho_compaction_contracts), 2
 RhoCompactionErrorValue
 (rho_compaction_contracts), 2
 RhoCompactionFailure
 (rho_compaction_contracts), 2
 RhoCompactionOutcome
 (rho_compaction_contracts), 2
 RhoCompactionPreparation
 (rho_compaction_contracts), 2
 RhoCompactionReason
 (rho_compaction_contracts), 2
 RhoCompactionResult
 (rho_compaction_contracts), 2
 RhoCompactionSettings
 (rho_compaction_contracts), 2
 RhoCompactionSkipped
 (rho_compaction_contracts), 2
 RhoCompactionSource
 (rho_compaction_contracts), 2
 RhoCompactionStartEvent
 (rho_compaction_contracts), 2
 RhoCompactor
 (rho_compaction_contracts), 2
 RhoCompletedToolContext
 (rho_agent_contracts), 2
 RhoContextUsage
 (rho_compaction_contracts), 2
 RhoDefaultAgentPolicy
 (rho_agent_contracts), 2
 RhoGeneratedCompaction
 (rho_compaction_contracts), 2
 RhoManualCompaction
 (rho_compaction_contracts), 2
 RhoMessageEndEvent
 (rho_agent_contracts), 2
 RhoMessageEvent (rho_agent_contracts), 2
 RhoMessageStartEvent
 (rho_agent_contracts), 2
 RhoMessageUpdateEvent
 (rho_agent_contracts), 2
 RhoNextTurnDecision
 (rho_agent_contracts), 2
 RhoNothingToCompact
 (rho_compaction_contracts), 2

RhoOneAtATimeQueue
 (rho_agent_contracts), [2](#)
RhoParallelToolExecution
 (rho_agent_contracts), [2](#)
RhoProvidedCompaction
 (rho_compaction_contracts), [2](#)
RhoProviderInputLimitCompaction
 (rho_compaction_contracts), [2](#)
RhoQueueMode (rho_agent_contracts), [2](#)
RhoQueueUpdateEvent
 (rho_agent_contracts), [2](#)
RhoRunContext (rho_agent_contracts), [2](#)
RhoSequentialToolExecution
 (rho_agent_contracts), [2](#)
RhoSessionCompactionEntry
 (rho_compaction_contracts), [2](#)
RhoSessionContextExclusionEntry
 (rho_compaction_contracts), [2](#)
RhoSessionEntry
 (rho_compaction_contracts), [2](#)
RhoSessionMessageEntry
 (rho_compaction_contracts), [2](#)
RhoSummaryCompactor
 (rho_compaction_contracts), [2](#)
RhoThresholdCompaction
 (rho_compaction_contracts), [2](#)
RhoToolBatch (rho_agent_contracts), [2](#)
RhoToolContext (rho_agent_contracts), [2](#)
RhoToolExecutionEndEvent
 (rho_agent_contracts), [2](#)
RhoToolExecutionMode
 (rho_agent_contracts), [2](#)
RhoToolExecutionStartEvent
 (rho_agent_contracts), [2](#)
RhoToolExecutionUpdateEvent
 (rho_agent_contracts), [2](#)
RhoTurnEndEvent (rho_agent_contracts), [2](#)
RhoTurnStartEvent
 (rho_agent_contracts), [2](#)