

Core R with RRnR modifications

Hooks in core R

<div>eval.c (bytecode interpreter) hooks</div> <div>RRnR_before & RRnR_after in DO_DOTCALL(), CALL OP, CALLBUILTIN OP</div> <div>RRnR_eval_before & RRnR_eval_after in eval()</div> <div>RRnR_JIT_before & RRnR_JIT_after in R_execClosure()</div>	<div>eval.c (AST interpreter) hooks</div> <div>RRnR_before & RRnR_after in eval()</div> <div>RRnR_browser_before & RRnR_browser_after in do_if(), do_for(), do_while(), do_begin()</div>
<div>connections.c hooks</div> <div>RRnR_stdout_vfprintf in dummy_vfprintf(), file_vfprintf(), stdout_vfprintf(), text_vfprintf()</div>	<div>lazyload.R hooks</div> <div>RRnR:::lazyload_before & RRnR:::lazyload_after in lazyLoadDBexec()</div>
<div>errors.c hooks</div> <div>RRnR_error in error()</div>	<div>main.c hooks</div> <div>RRnR_browser_before & RRnR_browser_after in do_browser()</div>
<div>debug.c hooks</div> <div>RRnR_trace_state in do_traceOnOff()</div>	<div>names.c hooks</div> <div>RRnR_before & RRnR_after in do_internal()</div>

RRnR

<div>RRnR.c wrapper functions</div> <div>- RRnR_before() - RRnR_after() - RRnR_eval_before() - RRnR_eval_after() - RRnR_JIT_before() - RRnR_JIT_after() - RRnR_stdout_vfprintf() - RRnR_browser_before() - RRnR_browser_after() - RRnR_error() - RRnR_trace_state()</div>	<div>RRnR.c registrator functions</div> <div>- RRnR_register_handlers() - RRnR_register_eval_handlers() - RRnR_register_JIT_handlers() - RRnR_register_stdout_vfprintf_handler() - RRnR_register_browser_handlers() - RRnR_register_error_handler() - RRnR_register_trace_state_handler() - RRnR_get_all_handlers() - RRnR_remove_all_handlers() - RRnR_restore_all_handlers()</div>
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RRnR package

<div>Handler functions</div> <div>- record_before() - record_after() - replay_before() - replay_after() - eval_handler_before() - eval_handler_after() - eval_suppressor_before() - eval_suppressor_after() - record_JIT_before() - record_JIT_after() - replay_JIT_before() - replay_JIT_after() - do_lazyload_before() - do_lazyload_after() - record_browser_before() - record_browser_after() - replay_browser_before() - replay_browser_after() - record_stdout_vfprintf() - error_handler() - trace_state()</div>
<div>C implementation</div> <div>- do_record() - do_replay() - do_get_replay_struct() - parse_options() - add_to_trace() - peek_trace() - read_trace() - add_env_replacement() - replace_env()</div>
<div>R implementation</div> <div>+ record() + recordFindBug() + replay() - clone_environments() - replace_environments() - clone_environment() - replace_environment() - iterate_environments()</div>