



```
[[clang::realtime]] void run_rt_thread()  
{  
    get_file_size();  
    do_malloc_free();  
    do_vector_reserve();  
    do_mutex_lock_unlock (m);  
    do_read_file();  
};
```

CMakeLists.txt:

```
target_compile_options(example PUBLIC  
    -fsanitize=realtime  
)
```

```
target_link_options(example PUBLIC  
    -fsanitize=realtime  
)
```

Real-time violation: intercepted call to real-time unsafe function `free` in real-time context! Stack trace:

```
#0 0xaaaaad2a1b56c in radsan::printStackTrace() /llvm-project/compiler-rt/lib/radsan/radsan_stack.cpp:36:3
#1 0xaaaaad2a1b2ec in printDiagnostics /llvm-project/compiler-rt/lib/radsan/radsan_context.cpp:57:3
#2 0xaaaaad2a1b2ec in radsan::Context::expectNotRealtime(char const*) /llvm-project/compiler-rt/lib/radsan/radsan_context.cpp:40:5
#3 0xaaaaad2a1bde4 in expectNotRealtime /llvm-project/compiler-rt/lib/radsan/radsan_interceptors.cpp:29:29
#4 0xaaaaad2a1bde4 in free /llvm-project/compiler-rt/lib/radsan/radsan_interceptors.cpp:231:5
#5 0xaaaaad2a404f0 in std::__unique_ptr<std::filesystem::__cxx11::path::_List::_Impl, std::filesystem::__cxx11::path::_List::_Impl_deleter>::~~unique_ptr() /usr/lib/gcc/aarch64-linux-gnu/12/../../../../include/c++/12/bits/unique_ptr.h:396:4
#6 0xaaaaad2a40460 in std::filesystem::__cxx11::path::_List::~~_List() /usr/lib/gcc/aarch64-linux-gnu/12/../../../../include/c++/12/bits/fs_path.h:688:24
#7 0xaaaaad2a3fe6c in std::filesystem::__cxx11::path::~~path() /usr/lib/gcc/aarch64-linux-gnu/12/../../../../include/c++/12/bits/fs_path.h:354:21
#8 0xaaaaad2a3f6c8 in do_read_file() /my_repo/main.cpp:143:30
#9 0xaaaaad2a3f32c in run_rt_thread() /my_repo/main.cpp:35:5
#10 0xaaaaad2a3fba8 in main::$_0::operator>()() const /my_repo/main.cpp:43:25
#11 0xaaaaad2a3fb88 in void std::__invoke_impl<void, main::$_0>(std::__invoke_other, main::$_0&&) /usr/lib/gcc/aarch64-linux-gnu/12/../../../../include/c++/12/bits/invoke.h:61:14
#12 0xaaaaad2a3fb3c in std::__invoke_result<main::$_0>::type std::__invoke<main::$_0>(main::$_0&&) /usr/lib/gcc/aarch64-linux-gnu/12/../../../../include/c++/12/bits/invoke.h:96:14
#13 0xaaaaad2a3fb14 in void std::thread::_Invoker<std::tuple<main::$_0>>::_M_invoke<0ul>(std::_Index_tuple<0ul>) /usr/lib/gcc/aarch64-linux-gnu/12/../../../../include/c++/12/bits/std_thread.h:279:13
#14 0xaaaaad2a3fae8 in std::thread::_Invoker<std::tuple<main::$_0>>::operator>()() /usr/lib/gcc/aarch64-linux-gnu/12/../../../../include/c++/12/bits/std_thread.h:286:11
#15 0xaaaaad2a3fa4c in std::thread::_State_impl<std::thread::_Invoker<std::tuple<main::$_0>>>::_M_run() /usr/lib/gcc/aarch64-linux-gnu/12/../../../../include/c++/12/bits/std_thread.h:231:13
#16 0xfffffa66631f8 (/lib/aarch64-linux-gnu/libstdc++.so.6+0xd31f8) (BuildId: a012b2bb77110e84b266cd7425b50e57427abb02)
#17 0xfffffa635d5c4 (/lib/aarch64-linux-gnu/libc.so.6+0x7d5c4) (BuildId: 317350dd9c806d5dfe9358afcdca6bf56f2b0a54)
#18 0xfffffa63c5d98 (/lib/aarch64-linux-gnu/libc.so.6+0xe5d98) (BuildId: 317350dd9c806d5dfe9358afcdca6bf56f2b0a54)
```



do_read_file();

do_vector_reverse();

[[clang::realtime]]

get_file_size();

void

`do_mat_to_c_defree();`

run_rtf_read()



(m)

do_mutex_lock

target_compilation(example

PUBLIC

Make lists.txt:

PUBLIC

fsanitize_realttime



target_link_options(example












































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































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