RADSan: A REALTIME-SAFETY SANITIZER





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Memory Allocation

malloc, calloc
realloc, reallocf,
valloc, alligned_alloc
free
posix_memalign

Filesystem, Streams

open, openat, creat, close,

fopen, fopenat, fclose, fread, fwrite

puts, fputs

Threads & Sleep

pthread_create, pthread_join

pthread_mutex_lock, pthread_mutex_unlock

pthread_cond_signal, pthread_cond_broadcast etc_

pthread_rwlock_rdlock, pthread_rwlock_unlock etc_

OSSpinLockLock, os_unfair_lock_lock

sleep, usleep, nanosleep

Sockets

socket
send, sendto, sendmsg
recv, recvfrom, recvmsg
shutdown



```
[[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
)
```