Intercept futex_wait?

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```
static __always_inline int
futex_wait (unsigned int *futex_word, unsigned int expected, int private)
{
  int err = lll_futex_wait (futex_word, expected, NULL, private);
```

```
/* Wait while *FUTEXP == VAL for an lll_futex_wake call on FUTEXP.  */
# define lll_futex_wait(futexp, val, private) \
  lll_futex_timed_wait (futexp, val, NULL, private)
```

```
# define lll_futex_timed_wait(futexp, val, timeout, private)          \
  lll_futex_syscall (4, futexp,                                       \
                           __lll_private_flag (FUTEX_WAIT, private),  \
                           val, timeout)
```

```
# define lll_futex_syscall(nargs, futexp, op, ...)                \
  ({                                                              \
    long int __ret = INTERNAL_SYSCALL (futex, nargs, futexp, op,  \
                                                   __VA_ARGS__);  \
    (__glibc_unlikely (INTERNAL_SYSCALL_ERROR_P (__ret))          \
     ? -INTERNAL_SYSCALL_ERRNO (__ret) : 0);                      \
  })
```

```
#define internal_syscall1(number, arg1)                \
({                                                     \
    unsigned long int resultvar;                       \
    TYPEFY (arg1, __arg1) = ARGIFY (arg1);             \
    register TYPEFY (arg1, _a1) asm ("rdi") = __arg1;  \
    asm volatile (                                     \
    "syscall\n\t"                                      \
    : "=a" (resultvar)                                 \
    : "0" (number), "r" (_a1)                          \
    : "memory", REGISTERS_CLOBBERED_BY_SYSCALL);       \
    (long int) resultvar;                              \
})
```

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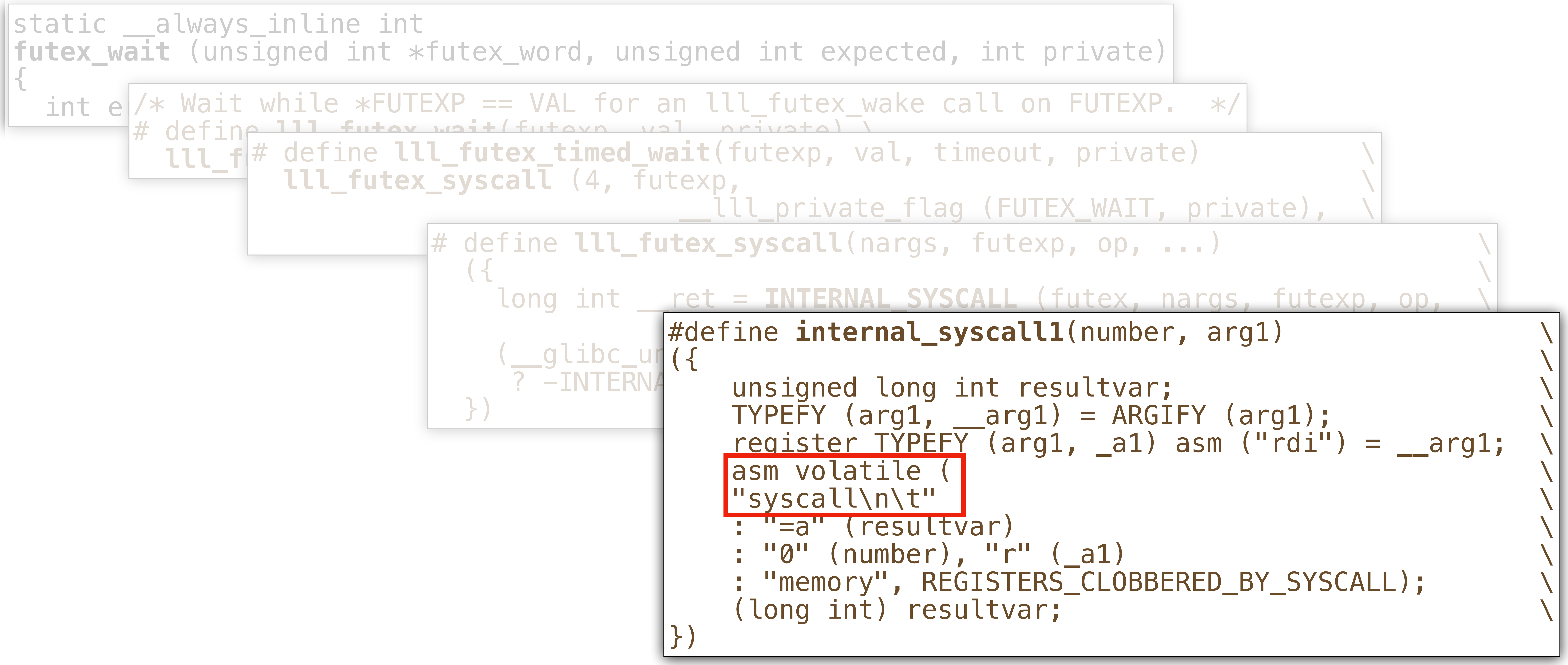

```
static __always_inline int
futex_wait (unsigned int *futex_word, unsigned int expected, int private)
{
  int e
```

```
/* Wait while *FUTEXP == VAL for an lll_futex_wake call on FUTEXP.  */
# define lll_futex_wait(futexp, val, private) \
  lll_f
```

```
# define lll_futex_timed_wait(futexp, val, timeout, private)      \
  lll_futex_syscall (4, futexp,                                   \
                     __lll_private_flag (FUTEX_WAIT, private),    \
```

```
# define lll_futex_syscall(nargs, futexp, op, ...)                \
  ({                                                              \
    long int __ret = INTERNAL_SYSCALL (futex, nargs, futexp, op,  \

    (__glibc_un
     ? -INTERNA
  })
```

```
#define internal_syscall1(number, arg1)                          \
({                                                               \
    unsigned long int resultvar;                                 \
    TYPEFY (arg1, __arg1) = ARGIFY (arg1);                       \
    register TYPEFY (arg1, _a1) asm ("rdi") = __arg1;            \
    asm volatile (                                               \
    "syscall\n\t"                                                \
    : "=a" (resultvar)                                           \
    : "0" (number), "r" (_a1)                                    \
    : "memory", REGISTERS_CLOBBERED_BY_SYSCALL);                 \
    (long int) resultvar;                                        \
})
```

perf

```
    ? (         ): example_extern/25315  ... [continued]: execve())                                           = 0
0.021 ( 0.003 ms): example_extern/25315 brk()                                                                 = 0xaaaaeb303000
0.092 ( 0.006 ms): example_extern/25315 faccessat(dfd: -100, filename: 0x9ffdb660, mode: 4)                   = -1 ENOENT (No such file or directory)
0.171 ( 0.005 ms): example_extern/25315 openat(dfd: CWD, filename: 0x9ffd9480, flags: RDONLY|CLOEXEC)         = 3
0.192 ( 0.003 ms): example_extern/25315 close(fd: 3)                                                          = 0
0.202 ( 0.005 ms): example_extern/25315 openat(dfd: CWD, filename: 0x9ffeb140, flags: RDONLY|CLOEXEC)         = 3
0.210 ( 0.004 ms): example_extern/25315 read(fd: 3, buf: 0xffffd59feaa0, count: 832)                          = 832
0.239 ( 0.003 ms): example_extern/25315 munmap(addr: 0xffff9fd6b000, len: 20480)                              = 0
0.245 ( 0.003 ms): example_extern/25315 munmap(addr: 0xffff9ff9a000, len: 43040)                              = 0
0.251 ( 0.006 ms): example_extern/25315 mprotect(start: 0xffff9ff7a000, len: 61440)                           = 0
0.279 ( 0.003 ms): example_extern/25315 close(fd: 3)                                                          = 0
0.288 ( 0.004 ms): example_extern/25315 openat(dfd: CWD, filename: 0x9ffeb680, flags: RDONLY|CLOEXEC)         = 3
0.294 ( 0.004 ms): example_extern/25315 read(fd: 3, buf: 0xffffd59fea80, count: 832)                          = 832
0.320 ( 0.009 ms): example_extern/25315 munmap(addr: 0xffff9fd3b000, len: 20480)                              = 0
0.332 ( 0.003 ms): example_extern/25315 munmap(addr: 0xffff9fd65000, len: 41672)                              = 0
0.338 ( 0.009 ms): example_extern/25315 mprotect(start: 0xffff9fd54000, len: 61440)                           = 0
0.361 ( 0.003 ms): example_extern/25315 close(fd: 3)                                                          = 0
0.367 ( 0.004 ms): example_extern/25315 openat(dfd: CWD, filename: 0x9ffebbc0, flags: RDONLY|CLOEXEC)         = 3
0.374 ( 0.003 ms): example_extern/25315 read(fd: 3, buf: 0xffffd59fea60, count: 832)                          = 832
0.402 ( 0.003 ms): example_extern/25315 munmap(addr: 0xffff9fb87000, len: 36864)                              = 0
0.407 ( 0.003 ms): example_extern/25315 munmap(addr: 0xffff9fd39000, len: 28264)                              = 0
0.413 ( 0.005 ms): example_extern/25315 mprotect(start: 0xffff9fd18000, len: 61440)                           = 0
0.490 ( 0.006 ms): example_extern/25315 close(fd: 3)                                                          = 0
0.521 ( 0.009 ms): example_extern/25315 openat(dfd: CWD, filename: 0x9ffec100, flags: RDONLY|CLOEXEC)         = 3
0.541 ( 0.003 ms): example_extern/25315 read(fd: 3, buf: 0xffffd59fea20, count: 832)                          = 832
0.576 ( 0.004 ms): example_extern/25315 munmap(addr: 0xffff9fae9000, len: 28672)                              = 0
0.590 ( 0.003 ms): example_extern/25315 munmap(addr: 0xffff9fb87000, len: 32880)                              = 0
0.602 ( 0.011 ms): example_extern/25315 mprotect(start: 0xffff9fb76000, len: 61440)                           = 0
0.666 ( 0.003 ms): example_extern/25315 close(fd: 3)                                                          = 0
0.697 ( 0.005 ms): example_extern/25315 set_tid_address(tidptr: 0xffff9ffe9af0)                               = 25315 (example_externa)
0.710 ( 0.003 ms): example_extern/25315 set_robust_list(head: 0xffff9ffe9b00, len: 24)                        = 0
0.727 ( 0.003 ms): example_extern/25315 rseq(rseq: 0xffff9ffea1c0, rseq_len: 32, sig: 3559439360)             = 0
0.781 ( 0.005 ms): example_extern/25315 mprotect(start: 0xffff9fd27000, len: 16384, prot: READ)               = 0
0.791 ( 0.004 ms): example_extern/25315 mprotect(start: 0xffff9fb85000, len: 4096, prot: READ)                = 0
0.799 ( 0.004 ms): example_extern/25315 mprotect(start: 0xffff9fd63000, len: 4096, prot: READ)                = 0
1.794 ( 0.023 ms): example_extern/25315 mprotect(start: 0xffff9ff89000, len: 45056, prot: READ)               = 0
1.874 ( 0.012 ms): example_extern/25315 mprotect(start: 0xaaaaae426000, len: 4096, prot: READ)                = 0
1.897 ( 0.012 ms): example_extern/25315 mprotect(start: 0xffff9fff0000, len: 8192, prot: READ)                = 0
1.953 ( 0.003 ms): example_extern/25315 prlimit64(resource: STACK, old_rlim: 0xffffd59ff4b8)                  = 0
1.983 ( 0.013 ms): example_extern/25315 munmap(addr: 0xffff9ffa5000, len: 67899)                              = 0
2.053 ( 0.009 ms): example_extern/25315 getrandom(ubuf: 0xffff9fd31930, len: 8, flags: NONBLOCK)              = 8
2.071 ( 0.003 ms): example_extern/25315 brk()                                                                 = 0xaaaaeb303000
2.083 ( 0.009 ms): example_extern/25315 brk(brk: 0xaaaaeb324000)                                              = 0xaaaaeb324000
2.321 ( 0.004 ms): example_extern/25315 futex(uaddr: 0xffff9ff977a4, op: WAKE|PRIVATE_FLAG, val: 2147483647)  = 0
2.489 ( 0.003 ms): example_extern/25315 rt_sigaction(sig: 0x21, act: 0xffffd59ff478, sigsetsize: 8)           = 0
2.495 ( 0.003 ms): example_extern/25315 rt_sigprocmask(how: UNBLOCK, nset: 0xffffd59ff6a8, sigsetsize: 8)     = 0
2.507 ( 0.004 ms): example_extern/25315 mprotect(start: 0xffff9f2f0000, len: 8388608, prot: READ|WRITE)       = 0
2.525 ( 0.004 ms): example_extern/25315 rt_sigprocmask(how: BLOCK, nset: 0xffff9fcd82c8, oset: 0xffffd59ff6a0, sigsetsize: 8) = 0
2.544 ( 0.096 ms): example_extern/25315 clone(clone_flags: VM|FS|FILES|SIGHAND|THREAD|SYSVSEM|SETTLS|PARENT_SETTID|CHILD_CLEARTID, newsp: 0xffff9faee940, parent_tidptr: 0xffff9faef1d0, tls: 0xffff9faef8c0, chil
2.647 ( 0.003 ms): example_extern/25315 rt_sigprocmask(how: SETMASK, nset: 0xffffd59ff6a0, sigsetsize: 8)     = 0
2.676 (         ): example_extern/25315 futex(uaddr: 0xffff9faef1d0, op: WAIT_BITSET|CLOCK_REALTIME, val: 25316, val3: MATCH_ANY) ...
2.689 ( 0.005 ms): example_extern/25316 rseq(rseq: 0xffff9faef8a0, rseq_len: 32, sig: 3559439360)             = 0
2.702 ( 0.003 ms): example_extern/25316 set_robust_list(head: 0xffff9faef1e0, len: 24)                        = 0
2.713 ( 0.006 ms): example_extern/25316 rt_sigprocmask(how: SETMASK, nset: 0xffff9faef7f0, sigsetsize: 8)     = 0
2.728 ( 0.006 ms): example_extern/25316 sched_get_priority_max(policy: 1)                                     = 99
2.742 ( 0.008 ms): example_extern/25316 sched_setscheduler(pid: 25316 (example_externa), policy: FIFO, param: 0xffff9faee6c0) = 0
2.772 ( 0.004 ms): example_extern/25316 munmap(addr: 0xffff972e0000, len: 13762560)                           = 0
2.779 ( 0.003 ms): example_extern/25316 munmap(addr: 0xffff9c000000, len: 53346304)                           = 0
2.785 ( 0.003 ms): example_extern/25316 mprotect(start: 0xffff98000000, len: 135168, prot: READ|WRITE)        = 0
2.808 ( 0.003 ms): example_extern/25316 sched_get_priority_min(policy: 1)                                     = 1
2.814 ( 0.004 ms): example_extern/25316 sched_setscheduler(pid: 25316 (example_externa), policy: FIFO, param: 0xffff9faee6c0) = 0
2.823 ( 0.003 ms): example_extern/25316 rt_sigprocmask(how: BLOCK, nset: 0xffff9faef7f0, sigsetsize: 8)       = 0
2.829 ( 0.005 ms): example_extern/25316 madvise(start: 0xffff9f2e0000, len_in: 8314880, behavior: MADV_DONTNEED) = 0
2.837 (         ): example_extern/25316 exit()                                                                = ?
2.676 ( 0.177 ms): example_extern/25315  ... [continued]: futex())                                            = 0
2.937 (         ): example_extern/25315 exit_group()                                                          = ?
```