Ruby master - Bug #18497
Fiber内でProcess.daemonするとSegmentation faultが起こる

01/19/2022 08:11 AM - sevenc-nanashi (Nanashi. @sevenc-nanashi)

Status: Closed
Priority: Normal
Assignee: 
Target version: ruby -v: ruby 3.1.0p0 (2021-12-25 revision fb4df44d16) [aarch64-linux]
Backport: 2.6: REQUIRED, 2.7: REQUIRED, 3.0: REQUIRED, 3.1: DONE

Description
ruby -e 'Fiber.new { Process.daemon true, true }.resume'

OCIのUbuntu(ruby 3.1.0p0 (2021-12-25 revision fb4df44d16) [aarch64-linux])で確認出来ましたが、WSL(ruby 3.1.0p0 (2021-12-25 revision fb4df44d16) [x86_64-linux])では確認出来ませんでした。

Associated revisions
Revision d650b176 - 01/19/2022 10:57 AM - nobu (Nobuyoshi Nakada)
rb_fiber_terminate must not return [Bug #18497]

In a forked process from a fiber, the fiber becomes the only fiber, fiber_switch does nothing as there is no other fibers, rb_fiber_terminate does not terminate the fiber. In that case, reaches the end of fiber_entry finally, which is declared as "COROUTINE" and should never return.

Revision 1c426ddb - 01/31/2022 10:22 AM - naruse (Yui NARUSE)
merge revision(s) 5c7af72304d0ad33cd3f1b1b2a4a44e8acdf5b2c.d650b17686d49c2ce8e6a87039861.154e93d4621: [Backport #18497]

Assuming EXIT_SUCCESS equals 0 is not portable

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Revision history
#1 - 01/19/2022 02:08 PM - nobu (Nobuyoshi Nakada)
- Backport changed from 2.6: UNKNOWN, 2.7: UNKNOWN, 3.0: UNKNOWN, 3.1: UNKNOWN to 2.6: REQUIRED, 2.7: REQUIRED, 3.0: REQUIRED, 3.1: REQUIRED

#2 - 01/19/2022 02:10 PM - nobu (Nobuyoshi Nakada)
- Status changed from Open to Closed

Applied in changeset qidd650b17686d49c2ce8e6a87039861.154e93d4621.

rb_fiber_terminate must not return [Bug #18497]
In a forked process from a fiber, the fiber becomes the only fiber, fiber_switch does nothing as there is no other fibers, rb_fiber_terminate does not terminate the fiber. In that case, reaches the end of fiber_entry finally, which is declared as "COROUTINE" and should never return.

#3 - 01/19/2022 02:34 PM - nobu (Nobuyoshi Nakada)
In 2.7 or earlier, bf3b2a43741e or the following patch is also needed.

diff --git a/cont.c b/cont.c
index 7f971a9e9d5..50403b8258d 100644
--- a/cont.c
+++ b/cont.c
@@ -1930,7 +1930,7 @@ fiber_current(void)
 }
 static inline rb_fiber_t* return_fiber(void)
 +return_fiber(bool terminate)
 { }
    rb_fiber_t *fiber = fiber_current();
    rb_fiber_t *prev = fiber->prev;
@@ -1941,7 +1941,7 @@ return_fiber(void)
 VM_ASSERT(root_fiber != NULL);
 -    if (root_fiber == fiber) {
 +    if (!terminate & root_fiber == fiber)
       rb_raise(rb_eFiberError, "can't yield from root fiber");
    }
 return root_fiber;
@@ -2087,7 +2087,7 @@ rb_fiber_terminate(rb_fiber_t *fiber, int need_interrupt)
 fiber->cont.machine.stack = NULL;
 fiber->cont.machine.stack_size = 0;
    next_fiber = return_fiber();
@@ -2121,13 +2121,13 @@ rb_fiber_resume(VALUE fiber_value, int argc, const VALUE *argv)
 VALUE rb_fiber_yield_kw(int argc, const VALUE *argv, const VALUE *kw_splat)
 { }
 -    return fiber_switch(return_fiber(), argc, argv, 0, kw_splat);
 +    return fiber_switch(return_fiber(true), argc, argv, 0, kw_splat);
 }
 VALUE rb_fiber_yield(int argc, const VALUE *argv)
 { }
 -    return fiber_switch(return_fiber(), argc, argv, 0, RB_NO_KEYWORDS);
 +    return fiber_switch(return_fiber(true), argc, argv, 0, RB_NO_KEYWORDS);
 }
 void

#4 - 01/31/2022 10:22 AM - naruse (Yui NARUSE)
- Backport changed from 2.6: REQUIRED, 2.7: REQUIRED, 3.0: REQUIRED, 3.1: REQUIRED to 2.6: REQUIRED, 2.7: REQUIRED, 3.0: REQUIRED, 3.1: DONE

ruby_3_1 1c426d2b25e2cccb169720e4f8994605596f594d merged revision(s)
5c7a72304d0ad3d3f21b24a4bc44e8acd5b2cd650b17686d49c2ce86a87039861154e93d4621.

Files
sf.log 17 KB 01/19/2022 sevenc-nanashi (Nanashi. @sevenc-nanashi)