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: WONTFIX, 2.7: DONE, 3.0: DONE, 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) 5c7af72304d0ad33cd3f21b24a4bc44e8acd5b2c.d650b17686d49c2ce8e6a87039861154e93d4621: [Backport #18497]

Revision 6a8c1664 - 03/13/2022 02:47 AM - nagachika (Tomoyuki Chikanaga)
merge revision(s) 5c7af72304d0ad33cd3f21b24a4bc44e8acd5b2c.d650b17686d49c2ce8e6a87039861154e93d4621: [Backport #18497]

08/31/2022
"COROUTINE" and should never return.

---
cont.c | 3 ++-
eval_intern.h | 2 +-  
test/fiber/test_process.rb | 15 ++++++++++++
test/ruby/test_fiber.rb | 5 ++++
4 files changed, 23 insertions(+), 2 deletions(-)

Revision 815453b - 03/19/2022 01:23 PM - NAKAMURA Usaku
merge revision(s) 5c7af7230d4d0ad33cd3f21b24a44e8acd5b2c,d650b17686d49c2ce8e6a87039861154e93d4621: [Backport #18497]

Assuming EXIT_SUCCESS equals 0 is not portable

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note that only backported a part of above patch because of incompatibility of ruby_2_7.

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 git|d650b17686d49c2ce8e6a87039861154e93d4621.

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rb_fiber_terminate must not return [Bug #18497]

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 @@
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 @@
3/19/2022 01:23 PM - NAKAMURA Usaku
merge revision(s) 5c7af7230d4d0ad33cd3f21b24a44e8acd5b2c,d650b17686d49c2ce8e6a87039861154e93d4621: [Backport #18497]

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@@ -1941,7 +1941,7 @@
2/3
VM_ASSERT(root_fiber != NULL);
+
+ 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)
+<@
+    next_fiber = return_fiber(true);
+    if (need_interrupt) RUBY_VM_SET_INTERRUPT(&next_fiber->cont.saved_ec);
+    fiber_switch(next_fiber, 1, &value, 0, RB_NO_KEYWORDS);
+>

@@ -2121,13 +2121,13 @@ VALUE
-    return_fiber();
+    return_fiber(false);
    if (argc) return rb_fiber_yield(argc, argv, kw_splat);
+

VALUE
rb_fiber_yield(int argc, const VALUE *argv, int kw_splat)
{
-    return_fiber();
+    return_fiber(false);
    if (argc) return rb_fiber_yield(argc, argv, kw_splat);
}

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rb_fiber_yield(int argc, const VALUE *argv)
{
-    return_fiber();
+    return_fiber(false);
    if (argc) return rb_fiber_yield(argc, argv, 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 1c426db25e220c169720e49894605996e594d merged revision(s)
5c7af72304d9ad33cd3f21b24a4bc44e8acd5b2c,d650b17686d49c2ce8e6a8703986154e93d4621.

#5 - 03/13/2022 03:12 AM - nagachika (Tomoyuki Chikanaga)
- Backport changed from 2.6: REQUIRED, 2.7: REQUIRED, 3.0: REQUIRED, 3.1: DONE to 2.6: REQUIRED, 2.7: REQUIRED, 3.0: DONE, 3.1: DONE

ruby_3_0 6a8c166498b5c6ca1dbc53248ffbe5f138f1af3 merged revision(s)
5c7af72304d9ad33cd3f21b24a4bc44e8acd5b2c,d650b17686d49c2ce8e6a8703986154e93d4621.

#6 - 04/07/2022 02:27 PM - usa (Usaku NAKAMURA)
- Backport changed from 2.6: REQUIRED, 2.7: REQUIRED, 3.0: DONE, 3.1: DONE to 2.6: WONTFIX, 2.7: DONE, 3.0: DONE, 3.1: DONE

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