

Ruby trunk - Feature #13881

Use getcontext/setcontext on OS X

09/08/2017 09:10 AM - naruse (Yui NARUSE)

Status:	Open
Priority:	Normal
Assignee:	
Target version:	
Description	
<p>getcontext/setcontext is first appeared on OS X 10.5 but deprecated on 10.6. It seems because POSIX removed them from recent specs.</p> <p>IEEE Std 1003.1, 2004 Edition says makecontext's use of function declarators with empty parentheses is an obsolescent feature. http://pubs.opengroup.org/onlinepubs/009695399/functions/makecontext.html</p> <p>Then POSIX.1-2008 removed those functions.</p> <p>But OS X 10.13 still has them maybe because some essential applications uses them for co-routines. Therefore we can use them for performance.</p> <pre>diff --git a/configure.in b/configure.in index 08e109317f..3e75eb3cf2 100644 --- a/configure.in +++ b/configure.in @@ -1142,8 +1142,6 @@ AS_CASE(["\$target_os"], ac_cv_header_syscall_h=no]) AS_IF([test \$macosx_10_5 = yes], [- ac_cv_func_getcontext=no - ac_cv_func_setcontext=no], [AC_DEFINE(BROKEN_SETREUID, 1) AC_DEFINE(BROKEN_SETREGID, 1) diff --git a/cont.c b/cont.c index c86095775c..f94883ef02 100644 --- a/cont.c +++ b/cont.c @@ -65,7 +65,15 @@ #ifndef _WIN32 #include <unistd.h> #include <sys/mman.h> -#include <ucontext.h> +# ifdef __APPLE__ +/* avoid deprecated maks on ucontext.h */ +int getcontext(ucontext_t *); +void makecontext(ucontext_t *, void (*)(), int, ...); +int setcontext(const ucontext_t *); +int swapcontext(ucontext_t * __restrict, const ucontext_t * __restrict); +# else +# include <ucontext.h> +# endif #endif #define RB_PAGE_SIZE (pagesize) #define RB_PAGE_MASK (~(RB_PAGE_SIZE - 1))</pre>	

History

#1 - 09/08/2017 09:13 AM - hsb (Hiroshi SHIBATA)

I found getcontext on High Sierra(10.17) beta.

```
~ > grep getcontext /usr/include/ucontext.h
int getcontext(ucontext_t *) __OSX_AVAILABLE_BUT_DEPRECATED(__MAC_10_5, __MAC_10_6, __IPHONE_2_0, __IPHONE_2_
```

0) __WATCHOS_PROHIBITED __TVOS_PROHIBITED;