

CLOCK_PROCESS_CPUTIME_ID clock doesn't increment seconds

Source: <http://linux.derkeiler.com/Mailing-Lists/Fedora/2007-02/msg04221.html>

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 - *Date:* Wed, 28 Feb 2007 11:29:25 -0500
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The following test case works fine on Core3 but fails on Core6.

```
$cat /etc/fedora-release  
Fedora Core release 3 (Heidelberg)
```

```
$ cat test.c  
#include <stdio.h>  
#include <unistd.h>  
#include <time.h>
```

```
int main(void) {  
    int i;  
    struct timespec start_rt, start_id;  
    struct timespec now_rt, now_id;  
  
    clock_gettime(CLOCK_REALTIME, &start_rt);  
    clock_gettime(CLOCK_PROCESS_CPUTIME_ID, &start_id);  
  
    for(i=0; i<5; i++) {  
        if(clock_gettime(CLOCK_REALTIME, &now_rt)!=0)  
        {  
            fprintf(stderr, "Error!\n");  
            return 1;  
        }  
        if(clock_gettime(CLOCK_PROCESS_CPUTIME_ID, &now_id))  
        {  
            fprintf(stderr, "Error!\n");  
            return 1;  
        }  
  
        // First column CLOCK_REALTIME  
        printf("%d.%d\t", now_rt.tv_sec - start_rt.tv_sec,  
            now_rt.tv_nsec - start_rt.tv_nsec);  
  
        // Second column CLOCK_PROCESS_CPUTIME_ID  
        printf("%d.%d\t", now_id.tv_sec - start_id.tv_sec,  
            now_id.tv_nsec - start_id.tv_nsec);  
    }  
}
```

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```
printf("\n");  
sleep(1);  
}
```

```
return 0;  
}
```

```
$ gcc test.c -lrt  
$ ./a.out  
0.73000 0.68477  
1.1563000 1.1142818  
2.3410000 2.2632301  
3.5258000 3.4122795  
4.7106000 4.5611411
```

```
$ /lib/libc.so.6
```

GNU C Library stable release version 2.3.3, by Roland McGrath et al.

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Compiled by GNU CC version 3.4.2 20041017 (Red Hat 3.4.2-6.fc3).

Compiled on a Linux 2.4.20 system on 2004-10-27.

Available extensions:

GNU libio by Per Bothner

crypt add-on version 2.1 by Michael Glad and others

linuxthreads-0.10 by Xavier Leroy

The C stubs add-on version 2.1.2.

BIND-8.2.3-T5B

NIS(YP)/NIS+ NSS modules 0.19 by Thorsten Kukuk

Glibc-2.0 compatibility add-on by Cristian Gafton

GNU Libidn by Simon Josefsson

libthread_db work sponsored by Alpha Processor Inc

Thread-local storage support included.

For bug reporting instructions, please see:

<<http://www.gnu.org/software/libc/bugs.html>>.

```
$ uname -a
```

```
Linux x.x.x 2.6.9-1.667 #1 Tue Nov 2  
14:41:25 EST 2004 i686 i686 i386 GNU/Linux
```

However on Core6:

```
$ cat /etc/fedora-release  
Fedora Core release 6 (Zod)
```

```
$ gcc test.c -lrt  
$ ./a.out  
0.5000 0.69347  
1.3222000 0.113973  
2.3297000 0.147403
```

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```
3.3354000 0.180369
4.3417000 0.213781
```

Note the seconds don't increment on the right column.

```
$ /lib/libc.so.6
```

GNU C Library stable release version 2.5, by Roland McGrath et al.

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Compiled by GNU CC version 4.1.1 20060928 (Red Hat 4.1.1-28).

Compiled on a Linux 2.6.9 system on 2006-10-08.

Available extensions:

The C stubs add-on version 2.1.2.

crypt add-on version 2.1 by Michael Glad and others

GNU Libidn by Simon Josefsson

GNU libio by Per Bothner

NIS(YP)/NIS+ NSS modules 0.19 by Thorsten Kukuk

Native POSIX Threads Library by Ulrich Drepper et al

BIND-8.2.3-T5B

RT using linux kernel aio

Thread-local storage support included.

For bug reporting instructions, please see:

<<http://www.gnu.org/software/libc/bugs.html>>.

```
$ uname -a
```

```
Linux x.x.x 2.6.18-1.2798.fc6xen #1
```

```
SMP Mon Oct 16 15:11:19 EDT 2006 i686 i686 i386
```

```
GNU/Linux
```

Any clue?

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JR

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fedora-list mailing list

fedora-list@xxxxxxxxxxx

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