NAME

sched_rr_get_interval − get the SCHED_RR interval for the named process

SYNOPSIS

#include <sched.h>

int sched_rr_get_interval(pid_t *pid***, struct timespec *** *tp***);**

DESCRIPTION

sched_rr_get_interval() writes into the *timespec* structure pointed to by *tp* the round-robin time quantum for the process identified by *pid*.

The *timespec* structure has the following form:

```
struct timespec {
   time_t tv_sec;    /* seconds */
   long   tv_nsec;   /* nanoseconds */
};
```

If *pid* is zero, the time quantum for the calling process is written into **tp*. The identified process should be running under the **SCHED_RR** scheduling policy. POSIX systems on which **sched_rr_get_interval**() is available define **_POSIX_PRIORITY_SCHEDULING** in <*unistd.h*>.

RETURN VALUE

On success, **sched_rr_get_interval**() returns 0. On error, −1 is returned, and *errno* is set appropriately.

ERRORS

EFAULT
Problem with copying information to userspace.

EINVAL
Invalid pid.

ENOSYS
The system call is not yet implemented (only on rather old kernels).

ESRCH
The process whose ID is *pid* could not be found.

CONFORMING TO

POSIX.1-2001.

NOTES

Linux Notes

POSIX does not specify any mechanism for controlling the size of the round-robin time quantum. However, Linux provides a (non-portable) method of doing this. The quantum can be controlled by adjusting the process's nice value (see **setpriority**(2)). Assigning a negative (i.e., high) nice value results in a longer quantum; assigning a positive (i.e., low) nice value results in a shorter quantum. The default quantum is 0.1 seconds; the degree to which changing the nice value affects the quantum has varied somewhat across kernel versions.

SEE ALSO

sched_setscheduler(2) has a description of the Linux scheduling scheme.

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COLOPHON

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