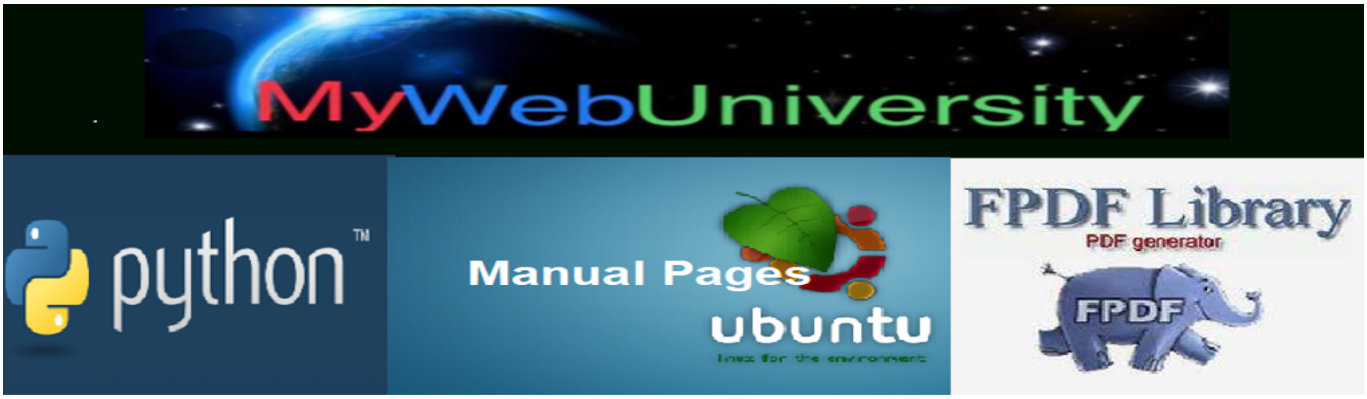

Rocky Enterprise Linux 9.2 Manual Pages on command 'sched_rr_get_interval.2'

$ man sched_rr_get_interval.2

SCHED_RR_GET_INTERVAL(2) Linux Programmer's Manual SCHED_RR_GET_INTERVAL(2)

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 specified process should be running under the SCHED_RR scheduling policy.

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.

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 user space.

EINVAL Invalid pid.

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

ESRCH Could not find a process with the ID pid.

CONFORMING TO

POSIX.1-2001, POSIX.1-2008.

NOTES

POSIX systems on which sched_rr_get_interval() is available define _POSIX_PRIORITY_SCHED?

ULING in <unistd.h>.

Linux notes

POSIX does not specify any mechanism for controlling the size of the round-robin time quantum. Older Linux kernels provide a (nonportable) 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 de? gree to which changing the nice value affects the quantum has varied somewhat across ker? nel versions. This method of adjusting the quantum was removed starting with Linux 2.6.24.

Linux 3.9 added a new mechanism for adjusting (and viewing) the SCHED_RR quantum: the /proc/sys/kernel/sched_rr_timeslice_ms file exposes the quantum as a millisecond value, whose default is 100. Writing 0 to this file resets the quantum to the default value.

SEE ALSO

sched(7)

COLOPHON

This page is part of release 5.10 of the Linux man-pages project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at https://www.kernel.org/doc/man-pages/.