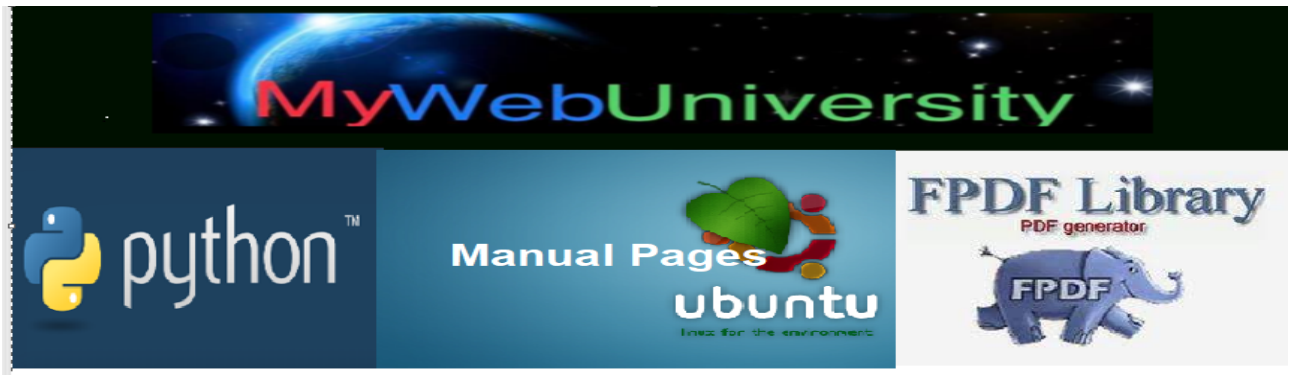


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## *Linux Ubuntu 26.04 Manual Pages on command 'sched_setparam.2'*

***$ man sched_setparam.2***

sched_setparam(2) System Calls Manual sched_setparam(2)

NAME

sched_setparam, sched_getparam - set and get scheduling parameters

LIBRARY

Standard C library (libc, -lc)

SYNOPSIS

```
#include <sched.h>

int sched_setparam(pid_t pid, const struct sched_param *param);

int sched_getparam(pid_t pid, struct sched_param *param);

struct sched_param {
    ...
    int sched_priority;
    ...
};
```

DESCRIPTION

sched_setparam() sets the scheduling parameters associated with the scheduling policy for the thread whose thread ID is specified in pid. If pid is zero, then the parameters of the calling thread are set. The interpretation of the argument param depends on the scheduling policy of the thread identified by pid. See sched(7) for a description of the scheduling policies supported under Linux.

sched_getparam() retrieves the scheduling parameters for the thread identified by pid. If pid is zero, then the parameters of the calling thread are retrieved.

sched_setparam() checks the validity of param for the scheduling policy of the thread. The

value param->sched_priority must lie within the range given by sched_get_priority_min(2) and sched_get_priority_max(2).

For a discussion of the privileges and resource limits related to scheduling priority and policy, see sched(7).

POSIX systems on which sched_setparam() and sched_getparam() are available define _POSIX_PRIORITY_SCHEDULING in <unistd.h>.

## RETURN VALUE

On success, sched_setparam() and sched_getparam() return 0. On error, -1 is returned, and errno is set to indicate the error.

## ERRORS

EINVAL Invalid arguments: param is NULL or pid is negative

EINVAL (sched_setparam()) The argument param does not make sense for the current scheduling policy.

EPERM (sched_setparam()) The caller does not have appropriate privileges (Linux: does not have the CAP_SYS_NICE capability).

ESRCH The thread whose ID is pid could not be found.

## STANDARDS

POSIX.1-2024.

## HISTORY

POSIX.1-2001.

## SEE ALSO

getpriority(2), gettid(2), nice(2), sched_get_priority_max(2), sched_get_priority_min(2), sched_getaffinity(2), sched_getscheduler(2), sched_setaffinity(2), sched_setattr(2), sched_setscheduler(2), setpriority(2), capabilities(7), sched(7)