



Linux Ubuntu 26.04 Manual Pages on command 'sched_get_priority_max.2'

\$ man sched_get_priority_max.2

sched_get_priority_max(2) System Calls Manual sched_get_priority_max(2)

NAME

sched_get_priority_max, sched_get_priority_min - get static priority range

LIBRARY

Standard C library (libc, -lc)

SYNOPSIS

```
#include <sched.h>

int sched_get_priority_max(int policy);

int sched_get_priority_min(int policy);
```

DESCRIPTION

sched_get_priority_max() returns the maximum priority value that can be used with the scheduling algorithm identified by policy. sched_get_priority_min() returns the minimum priority value that can be used with the scheduling algorithm identified by policy. Supported policy values are SCHED_FIFO, SCHED_RR, SCHED_OTHER, SCHED_BATCH, SCHED_IDLE, and SCHED_DEADLINE. Further details about these policies can be found in sched(7).

Processes with numerically higher priority values are scheduled before processes with numerically lower priority values. Thus, the value returned by sched_get_priority_max() will be greater than the value returned by sched_get_priority_min().

Linux allows the static priority range 1 to 99 for the SCHED_FIFO and SCHED_RR policies, and the priority 0 for the remaining policies. Scheduling priority ranges for the various policies are not alterable.

The range of scheduling priorities may vary on other POSIX systems, thus it is a good idea for portable applications to use a virtual priority range and map it to the interval given

by `sched_get_priority_max()` and `sched_get_priority_min()`. POSIX.1 requires a spread of at least 32 between the maximum and the minimum values for `SCHED_FIFO` and `SCHED_RR`.
POSIX systems on which `sched_get_priority_max()` and `sched_get_priority_min()` are available define `_POSIX_PRIORITY_SCHEDULING` in `<unistd.h>`.

RETURN VALUE

On success, `sched_get_priority_max()` and `sched_get_priority_min()` return the maximum/minimum priority value for the named scheduling policy. On error, -1 is returned, and `errno` is set to indicate the error.

ERRORS

`EINVAL` The argument `policy` does not identify a defined scheduling policy.

STANDARDS

POSIX.1-2024.

HISTORY

POSIX.1-2001.

SEE ALSO

`sched_getaffinity(2)`, `sched_getparam(2)`, `sched_getscheduler(2)`, `sched_setaffinity(2)`,
`sched_setparam(2)`, `sched_setscheduler(2)`, `sched(7)`