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

NAME top

sched_yield - yield the processor

SYNOPSIS top

```
#include <sched.h>

int sched_yield(void);
```

DESCRIPTION top

sched_yield() causes the calling thread to relinquish the CPU. The thread is moved to the end of the queue for its static priority and a new thread gets to run.

RETURN VALUE top

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

ERRORS top

In the Linux implementation, **sched_yield**() always succeeds.

CONFORMING TO top

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

NOTES top

If the calling thread is the only thread in the highest priority list at that time, it will continue to run after a call to **sched_yield**().

POSIX systems on which **sched_yield**() is available define **_POSIX_PRIORITY_SCHEDULING** in *<unistd.h>*.

Strategic calls to **sched_yield**() can improve performance by giving other threads or processes a chance to run when (heavily) contended resources (e.g., mutexes) have been released by the caller. Avoid calling **sched_yield**() unnecessarily or inappropriately (e.g., when resources needed by other schedulable threads are still held by the caller), since doing so will result in unnecessary context switches, which will degrade system performance.

SEE ALSO top

sched(7)

COLOPHON top

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