NAME

chrt - manipulate the real-time attributes of a process

SYNOPSIS

chrt [*options*] prio *command [*arg*]...*
chrt [*options*] **-p** [*prio*] pid

DESCRIPTION

chrt sets or retrieves the real-time scheduling attributes of an existing *pid*, or runs *command* with the given attributes. Both policy (one of **SCHED_OTHER**, **SCHED_FIFO**, **SCHED_RR**, **SCHED_BATCH**, or **SCHED_IDLE**) and priority can be set and retrieved.

The **SCHED_BATCH** policy is supported since Linux 2.6.16. The **SCHED_IDLE** policy is supported since Linux 2.6.23.

The **SCHED_RESET_ON_FORK** flag for policies SCHED_RR and SCHED_FIFO is supported since Linux 2.6.31.

OPTIONS

-a, --all-tasks

Set or retrieve the scheduling attributes of all the tasks (threads) for a given PID.

-b, --batch

Set scheduling policy to **SCHED_BATCH** (Linux specific).

-f, --fifo

Set scheduling policy to **SCHED_FIFO**.

-i, --idle

Set scheduling policy to **SCHED_IDLE** (Linux specific).

-m, --max

Show minimum and maximum valid priorities, then exit.

-o, --other

Set policy scheduling policy to **SCHED_OTHER**.

-p, --pid

Operate on an existing PID and do not launch a new task.

-r, --rr Set scheduling policy to **SCHED_RR**. When policy is not defined the **SCHED_RR** is used as default.

-R, --reset-on-fork

Add **SCHED_RESET_ON_FORK** flag to the **SCHED_FIFO** or **SCHED_RR** scheduling policy (Linux specific).

-v, --verbose

Show status information.

-h, --help

Display help text and exit.

-V, --version

Display version information and exit.

USAGE

The default behavior is to run a new command:

chrt *prio command [*arguments*]*

You can also retrieve the real-time attributes of an existing task:

chrt -p *pid*

Or set them:

chrt -r -p *prio pid*

PERMISSIONS

> A user must possess **CAP_SYS_NICE** to change the scheduling attributes of a process. Any user can retrieve the scheduling information.

NOTES

> Only **SCHED_FIFO**, **SCHED_OTHER** and **SCHED_RR** are part of POSIX 1003.1b Process Scheduling. The other scheduling attributes may be ignored on some systems.
>
> Linux default scheduling policy is **SCHED_OTHER**.

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SEE ALSO

> taskset(1), nice(1), renice(1)
>
> See sched_setscheduler(2) for a description of the Linux scheduling scheme.

AVAILABILITY

> The chrt command is part of the util-linux package and is available from ftp://ftp.kernel.org/pub/linux/utils/util-linux/.