

## 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**.

## AUTHOR

Written by Robert M. Love.

## COPYRIGHT

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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/>.