

עבודה מסכמת – מערכות הפעלה

מצורפים צילומי מסך שמראים את שינויי מדיניות התיזמון והעדיפות שנעשו באמצעות התכנית שכתבתי:

SCHED_OTHER:

The first terminal window shows the command `./set_policy 0 0` being executed. The output indicates that the policy and priority before the change were `policy - OTHER, priority - 0`, and after the change, they remained `policy - OTHER, priority - 0`. The second terminal window shows the command `ps ax | grep set_policy` being executed, which lists the process `20460 pts/4 S+ 0:00 ./set_policy 0 0`. It also shows the command `chrt -p 20460` being executed, which sets the current scheduling policy to `SCHED_OTHER` and the current scheduling priority to `0`.

SCHED_FIFO:

The first terminal window shows the command `sudo ./set_policy 1 5` being executed. The output indicates that the policy and priority before the change were `policy - OTHER, priority - 0`, and after the change, they became `policy - FIFO, priority - 5`. The second terminal window shows the command `ps ax | grep set_policy` being executed, which lists the process `20480 pts/4 S+ 0:00 sudo ./set_policy 1 5`. It also shows the command `chrt -p 20481` being executed, which sets the current scheduling policy to `SCHED_FIFO` and the current scheduling priority to `5`.

SCHED_RR:

The first terminal window shows the command `sudo ./set_policy 2 8` being executed. The output indicates that the policy and priority before the change were `policy - OTHER, priority - 0`, and after the change, they became `policy - RR, priority - 8`. The second terminal window shows the command `ps ax | grep set_policy` being executed, which lists the process `20490 pts/4 S+ 0:00 sudo ./set_policy 2 8`. It also shows the command `chrt -p 20491` being executed, which sets the current scheduling policy to `SCHED_RR` and the current scheduling priority to `8`.

SCHED_IDLE:

The image shows two terminal windows side-by-side. The left window shows the execution of the `./set_policy 5 0` command, which changes the scheduling policy of PID 20502 from `OTHER` to `IDLE`. The right window shows the execution of `ps ax | grep set_policy`, which lists the process with its new policy. It also shows the execution of `chrt -p 20502` to verify the policy and `pid 20502's current scheduling priority: 0`.

```
ori@ori-VirtualBox: ~/Desktop/OS-FinalWork/fwork_312488596/q_3
File Edit View Search Terminal Help
ori@ori-VirtualBox:~/Desktop/OS-FinalWork/fwork_312488596/q_3$ ./set_policy 5 0
The policy and priority before the change: policy - OTHER, priority - 0
Scheduler of type: 5
The policy and priority after the change: policy - IDLE , priority - 0
[]

ori@ori-VirtualBox: ~/Desktop/OS-FinalWork/fwork_312488596/q_3
File Edit View Search Terminal Help
ori@ori-VirtualBox:~/Desktop/OS-FinalWork/fwork_312488596/q_3$ ps ax | grep set_policy
20502 pts/4 S+ 0:00 ./set_policy 5 0
20504 pts/2 S+ 0:00 grep --color=auto set_policy
ori@ori-VirtualBox:~/Desktop/OS-FinalWork/fwork_312488596/q_3$ chrt -p 20502
pid 20502's current scheduling policy: SCHED_IDLE
pid 20502's current scheduling priority: 0
ori@ori-VirtualBox:~/Desktop/OS-FinalWork/fwork_312488596/q_3$
```

SCHED_DEADLINE:

The image shows two terminal windows side-by-side. The left window shows the execution of the `sudo ./set_policy 6 0` command, which changes the scheduling policy of PID 20513 from `OTHER` to `DEADLINE`. The right window shows the execution of `ps ax | grep set_policy`, which lists the process with its new policy. It also shows the execution of `chrt -p 20513` to verify the policy and `pid 20513's current runtime/deadline/period parameters: 30000000/100000000/100000000`.

```
ori@ori-VirtualBox: ~/Desktop/OS-FinalWork/fwork_312488596/q_3
File Edit View Search Terminal Help
ori@ori-VirtualBox:~/Desktop/OS-FinalWork/fwork_312488596/q_3$ sudo ./set_policy 6 0
The policy and priority before the change: policy - OTHER, priority - 0
The policy and priority after the change: policy - DEADLINE, priority - 0
[]

ori@ori-VirtualBox: ~/Desktop/OS-FinalWork/fwork_312488596/q_3
File Edit View Search Terminal Help
ori@ori-VirtualBox:~/Desktop/OS-FinalWork/fwork_312488596/q_3$ ps ax | grep set_policy
20512 pts/4 S+ 0:00 sudo ./set_policy 6 0
20513 pts/4 S+ 0:00 ./set_policy 6 0
20516 pts/2 S+ 0:00 grep --color=auto set_policy
ori@ori-VirtualBox:~/Desktop/OS-FinalWork/fwork_312488596/q_3$ chrt -p 20513
pid 20513's current scheduling policy: SCHED_DEADLINE
pid 20513's current scheduling priority: 0
pid 20513's current runtime/deadline/period parameters: 30000000/100000000/100000000
ori@ori-VirtualBox:~/Desktop/OS-FinalWork/fwork_312488596/q_3$
```