USER : the effective user name of the task’s owner.

PR : priority, scheduling priority of the task.

NI : nice value of the task. negative nice value means higher priority, wheras a positive nice value means lower priority. zero means priority will not be adjusted in determining a task’s dispatch-ability.

VIRT : virtual memory size. the total amount of virtual memory used by the task. it includes all code, data and shared libraries plus pages that have been swapped out and pages that have been mapped but not used.

RES : resident memory size.

VIRT가 representing the non-swapped physical memory a task is currently using. 이라면 RES는 also the sum of the RSan ,RSfd and RSsh fields.

It can include private anonymous pages, private pages mapped to files(including program images and shared libraries) plus shared anonymous pages. All such memory is backed by the swap file represented separately under SWAP.

Lastly, this field may also include shared file-backed pages which, when modified, act as a dedicated swap file and thus will never impact SWAP.

SHR : shared memory size, a subset of resident memory (RES) that may be used by other processes. It will include shared anonymous pages and shared file-backed pages. it also includes private pages mapped to files representing program images and shared libraries.

S : process status

d : uninterruptible sleep

r : running

s : sleeping

T : stopped by job control signal

t : stopped by debugger during trace

Z : zombie

%CPU : cpu usage. percentage of total cpu time.

%MEM : memory usage (RES). a task’s currently resident share of available physical memory.

TIME+ : cpu time, hundredths.

the same as time, but reflecting more granularity through hundredths of a second.

COMMAND : display the command line used to start a task or the name of the associated program. ( \* 다른 부분과 달리 크기 제한이 512바이트 까지 존재한다.)

PID : status 파일의 Pid와 같다.

S : status 파일의 State와 같다.

VIRT : status 파일의 VmSize 와 같다.

RES : status 파일의 VmRSS와 같다.

SHR : status 파일의 RssFile + RssShmem과 같다.

COMMAND : comm 파일의 값과 같다.

%MEM : meminfo 에서 memTotal 을 분모로, 프로세스의 값은 분자로 하여 퍼센트 계산

sched 파일 가면 runtime 적혀있다..

sched 파일의 prio – 100 이 PR값이다.

prio == 0 이면 PR = rt

stat 파일의 19번째 수가 NI값.

18번째는 PR값.

15번째 값 / 100 하면 TIME + 값 나온다.

%MEM : /proc/meminfo 에서 memTotal 을 분모로, process의 RES값을 분자로 하여 소수 둘째까지 계산.

/proc/stat 에서 cpu개수 파악 가능.

/proc/[pid]/status 의 Uid 의 uid값을 getpwuid에 넣어줘야 username파악 가능.

0은 root

1000은 hj

USER : getpwuid system call 통해 파악 가능.

pr == -100 이면 rt로 표현.





