

NAME

`openproc`, `closeproc` – initialize process information from `/proc/`

SYNOPSIS

```
#include <proc/readproc.h>
```

```
PROCTAB* openproc (int flags, ... );  
void closeproc (PROCTAB* PT);
```

SYNOPSIS

The **openproc** function initializes a PROCTAB structure which can be used by iterated readproc calls to get information on current processes. Depending on *flags*, openproc may need a second argument or a second and third argument (see below).

closeproc closes all files opened by **openproc** and deallocates the memory allocated by **openproc**.

The PROCTAB structure is defined in `<proc/readproc.h>`

RETURN VALUE

openproc returns a pointer to a PROCTAB structure, or NULL if an error occurs. This usually means that `/proc` cannot be read by the process.

FLAGS

The behaviour of **openproc** is controlled by the following set of flags, which may be ORed together. There are three different kinds of flags. The first group of flags determines which information gets read from `/proc/#pid` for each process. The second group of flags (of which only one can be enacted for a `opendir` call) restricts which processes information is read for by providing a list of criteria. The third group of flags restricts this as well, but doesn't need arguments. These may be used together again.

PROC_FILLMEM

read information from `/proc/#pid/statm`

PROC_FILLCOM

allocate *cmdline* part of *proc_t* and read information from `/proc/#pid/cmdline`

PROC_FILLENV

allocate *environ* part of *proc_t* and read information from `/proc/#pid/environ`

PROC_FILLUSR

resolve user ids to names via `/etc/passwd`

PROC_FILLGRP

resolve group ids to names via `/etc/group`

PROC_FILLSTATUS

read information from `/proc/#pid/status`

PROC_FILLSTAT

read information from `/proc/#pid/stat`

PROC_FILLARG

equivalent to PROC_FILLCOM

PROC_FILLCGROUP

alloc and fill in cgroup

PROC_FILLSUPGRP

resolve supplementary group id -> group name

PROC_FILLOOM

fill in `proc_t` `oom_score` and `oom_adj`

PROC_FILLNS

fill in `proc_t` namespace information

PROC_FILLSYSTEMD

fill in `proc_t` systemd information

PROC_LOOSE_TASKS

treat threads as if they were processes

PROC_PID (2nd argument **pid_t*** *pidlist*)

lookup only processes whose pid is contained in *pidlist* (the list is terminated with 0)

PROC_UID (arguments **uid_t*** *uidlist*, **int** *n*)

lookup only processes whose user id is contained in *uidlist* (where *n* is the number of uids contained in the list)

PROC_EDITCGRPCVT

edit cgroup as single vector

PROC_EDITCMDLCVT

edit cmdline as single vector

PROC_EDITENVRCVT

edit environ as single vector

NOTE

Only one of the flags needing additional arguments (**PROC_{PID,UID}**) may be used at a time.

SEE ALSO

`readproc(3)`, `readproctab(3)`, `/proc/`, `/usr/include/proc/readproc.h`,

REPORTING BUGS

Please send bug reports to procps@freelists.org