PSTART(a)

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NAME

pstart – start process

SYNOPSIS

(pstart =42.)

```
pid = pstart(pprior, chan, segnum, iprior, parent)
pid = pstart(pprior, chan, segnum, nispace, ndspace, prcident)
int pprior;    /* processor priority (1 <= pprior <= 7) */
int chan;      /* process control channel number */
int segnum;    /* entry in parent PCB of child segment */
int iprior;    /* initial process priority (0-0360) */
int parent;    /* process number of parent */
int nispace;   /* number of kernel I-space registers */
int ndspace;   /* number of kernel D-space registers */
int prcident;  /* kernel process identifier character */
```

DESCRIPTION

Pstart puts an entry for the new process in the DCT table. The new process must be started by the parent process by sending it a wakeup event after the call to *pstart.* The first calling sequence is for starting up a supervisor-user process. The second calling sequence is for starting up a kernel-mode process. The processor priority specified *pprior* is 1 for a supervisory process and from 3 to 7 for a kernel process. The priority of 2 is not allowed. The process control channel is specified by *chan.* For a supervisory process, *segnum* is the entry in the parent PCB of the segment ID of the PCB of the process being started. For a kernel process, *segnum* is the entry in the parent PCB of the segment ID of the first kernel process segment. The basic priority at which a process is to run (0 - 0360) is specified by *iprior* for a supervisory process. The parent process number is given by *parent.* For a kernel process, *nispace* specifies the total number of I-space segments in the process and *ndspace* specifies the total number of D-space segments in the process. The process identification code is given in *prcident.* This is used by the ps command (ps-e) to identify the kernel process name as defined in /mrt/kprc (kprc-g).

The process number of the started process is returned from C. The high order byte of the process number is the incarnation count and the low order byte is the entry number in the DCT table.

SEE ALSO

ps(e), kprc(g).

DIAGNOSTICS

A –1 is returned from C if the process could not be started because of insufficient swap space, lack of segment ID's or lack of process slots.