Bell Telephone Laboratories, Incorporated
PROGRAM APPLICATION INSTRUCTION

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PA-1C600-01
Section 12 (a)
Issue 1, 10/1/77
AT&TCo SPCS

GROWSEG (a)

NAME

growseg— increase or decrease the size of a segment

SYNOPSIS

(growseg = 8.)
growseg (segnum,size)

DESCRIPTION

The segment indexed by *segnum* is set to *size* words. New swap space will be allocated if the new size causes the segment to cross a sector boundary on the swap device. The new piece is zeroed and appears at the high address end for normal segments and the low address end for stack segments. If the segment is decreasing in size, the high address end is truncated. A value of 1 is returned from C.

ALSO SEE

DIAGNOSTICS

Return of -1:

1) *segnum* points to a null segment
2) *segnum* points to an inactive segment
3) System swap space is saturated
4) New size causes the process to exceed available memory (the "pcbnold" bit will be set on all user mode segments if fail return is for this reason).
5) The new size will cause the segment to require nonexistant or privileged segmentation registers (eg the new size of a segment starting in user I-space register 7 causes the segment to spill over into D-space base register 0).

Fault return with code 10.:

1) *segnum* exceeds the number of available segment table entries
2) the segment is non-swap