

RSX-11M V3.2

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SAVING MEMORY UNDER RSX-11M V3.2

Only two PDP-11s support memory sizes greater than 124K words: the 11/44, and the 11/70. Since RSX-11M-PLUS is the natural choice on the 44 and 70, most use of RSX-11M should be on machines which have relatively small amounts of memory. Unfortunately, the default RSX-11M V3.2 Sysgen options do not make optimal use of memory on small systems.

Do the following to tailor an RSX-11M V3.2 system to a memory-limited machine:

1. SYSVMR.COMD sets the size of POOL to the maximum. If you don't need that much, change it.
2. For systems with the full duplex terminal driver, SYSVMR sets TTPAR to 8K words, but it can usually be made much smaller. TTPAR contains code plus a private buffer pool, which is allocated in 20 word chunks for type-ahead buffers, UCB extensions, and i/o-pending buffers. Since the space needed for the i/o-pending buffers depends on both system activity and the sizes of the i/o requests, an exact sizing guideline cannot be given. A rough guideline for sizing TTPAR is:

$$P = C + (20 * T) + (60 * A)$$

Where P is the size of TTPAR in decimal words
C is the code size (from the line "TASK IMAGE SIZE" in [1,34]TTDRV.MAP)
T is the number of terminals in the system
A is the number of users likely to be ACTIVELY typing at one time

The value obtained for P is in decimal words; convert to octal bytes/100 for the TTPAR SET /MAIN command. If space is exhausted in TTPAR, the driver will attempt to use the system pool, so if you're short on system pool, pad TTPAR for comfort.