A/UX: Maximum Address Space per Process (8/94)

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TOPIC ---

I'm running A/UX on a Macintosh IIfx with 32MB of RAM. When running a test program, it appeared that one process can allocate a maximum of 28MB, although several processes together can allocate the maximum available virtual memory (32MB swap + 13MB internal memory available). Is there a way to increase the limit of 28MB?

DISCUSSION ---

We aren't sure how the "test program" came out with a maximum of 28MB address space allocated to one process. What kind of method did the tested program allocate for memory, via sbrk(), malloc(), calloc() or other system calls?

The maximum user address space for process is by default 40,000 pages, which is about 1GB. The kernel parameter for the maximum user address space is MAXUMEM, shown via "kconfig -av." Although it can be up to 1GB, it still depends on how much swap space and physical memory is currently available. One way to increase to the address space limit for a process is to increase swap space (swap -a)!

Note that the MINASMEM (the minimum number of 10 pages reserved for the system to avoid deadlock) must be taken into consideration when calculating the current available swap disk space and resident memory.

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