A/UX: Why You Can't Set I/O Buffer Size (8/94)

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TOPIC ---

Some users have wanted to increase the serial input/output buffer size to improve system performance.

DISCUSSION ---

You probably won't be able to do this in a direct fashion. The reason is that a linked list of data structures in the kernel controls A/UX serial input and output. These structures include:

- "clist" (the head of a linked-list queue of characters)

- "cblock" (a character-block structure)

- "ccblock" (a character-control block for interrupt-level control).

Some of the data structure sizes were constant when the A/UX kernel was built. These include "CLSIZE" (26, size of "clist" block) defined in the "clist" structure and the "TTYHOG" (256, maximum number of input characters buffer). As a result, you cannot change these numbers, unless you have source to recompile the kernel. Likewise, it is doubtful that the programming can change these constants.

However, there is a kernel-tunable parameter called "NCLIST" (number of system "clists"). You can raise this number with the "kconfig" command. This might speed up the input/output processing.

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