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A/UX: Serial Buffer Size And Storage Issues

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Article Change History

08/31/92 - REVIEWED
            • For technical accuracy.

TOPIC ---

This article discusses the input serial buffer, including questions concerning
the default size of this buffer, whether it can be changed, and where the size
of this buffer is stored. Answers involve the SCC (Serial Communication
Controller) chip and the A/UX TTY device driver.

DISCUSSION --

On the hardware side, the SCC chip has a three-character buffer. It is
doubtful that the built-in buffer size can be changed.

The A/UX TTY device driver uses the "clist" style of character buffering. The
"cblocks" in A/UX are only 26 bytes. This is a defined constant value in the
kernel (#define CLSIZE 26 in /usr/include/sys/tty.h). To change it, you must
re-compile the kernel.

In general, a hardware overrun error occurs, if the SCC buffer overflows
because the input device driver doesn't read it often enough.
A software overrun error occurs if an input device driver's buffer overflows
because the application (like a communication program) doesn't issue read
calls to the driver often enough, .

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