

## IEEE Standards Interpretation for IEEE Std 1003.1™-1990 IEEE Standard for Information Technology--Portable Operating System Interfaces (POSIX®)

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### Interpretation Request #29

**Topic:** SSIZE\_MAX minimum values **Relevant Sections:** 2.8.6 **Classification:** Editorial defect

Table 2-7 in section 2.8.6 (Invariant Values) lists `{_POSIX_SSIZE_MAX}` as the value for the symbol `{SSIZE_MAX}`. It is not made clear in this section that an implementation is permitted to support a value for `{SSIZE_MAX}` that exceeds `{_POSIX_SSIZE_MAX}`.

Without clarification, it might be possible to interpret the standard as requiring all implementations to set `{SSIZE_MAX}` to 32767. The text of sections 2.8.2 through 2.8.5 explicitly permit the symbols in tables 2-5 and 2-6 to take on values larger than the minimum values in table 2-3. The third columns of tables 2-4 and 2-5 are even titled "Minimum Value".

In contrast to this possible interpretation, BSD currently declares the `read()` and `write()` functions with return values and `nbyte` parameters to be 32-bit signed ints, for which `SSIZE_MAX` would be defined to be `MAX_INT`, 21474783647 not 32767.

### Interpretation Response

The third column header in table 2-7 had the word "Minimum" inadvertently omitted.

### Rationale for Interpretation

This is an editorial defect with no impact on test assertions.