

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

Topic: ignoring errors **Relevant Sections:** 6.4.1.2, 6.4.2.2, B.6.4

In 6.4.1.2 Description [Read from a File], page 116, line 116:

"If nbytes is zero, the read() function shall return zero and have no other results."

In 6.4.2.2 Description [Write to a File], page 118, lines 190-191:

"If nbytes is zero and the file is a regular file, the write() function shall return zero and have no other results."

In B.6.4 Input and Output, page 266, lines 3433-3438:

"POSIX.1 requires that no action be taken when nbytes is zero. This is not intended to take precedence over the detection of errors (such as invalid buffer pointers or file descriptors). This is consistent with the rest of POSIX.1, but the phrasing here could be misread to require the detection of the zero case before any other errors. A value of zero is considered a correct value, for which the semantics are a no-op."

Rather than being a misreading, the interpretation of 6.4.1.2 and 6.4.2.2 that other errors shall be ignored seems to be the only possible interpretation permitted by the normative text. Is the rationale in error?

Interpretation Response

The text in 6.4.1.2 and 6.4.2.2 describes the behaviour only in the absence of error conditions. The rationale is therefore correct.

Rationale for Interpretation

By convention, the Description describes behaviour only in the absence of error conditions, unless explicitly stated. It is expected that a future issue of the standard will clarify

fy this. The original intention in this case was to leave error checking optional.