

IEEE Standards Interpretations for IEEE Std 1003.2™-1992 IEEE Standard for Information Technology--Portable Operating System Interfaces (POSIX®)-- Part 2: Shell and Utilities

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Interpretation Request #70

Topic: message format of POSIX.2 utilities in C locale **Relevant Clauses:** various

IEEE Std 1003.2-1992 states particular message formats for utility output on standard output and standard error for the POSIX locale. This matter is of particular interest since it will effect how this section of POSIX.2 is tested. An example follows; subclause 4.10.6.2 utility `cmp` states "... the following diagnostic message shall be written in the POSIX Locale,... `"cmp: EOF on %s%s\n"`, `<name of shorter file>`, `<additional info>`"

This would seem to preclude implementations that Choose their default POSIX locale to be that other than American English and/or Choose to use an enhanced error message format that gives additional information including the above message; for example: `UX:cmp: INFO: EOF on example1.txt`

Are implementations that take approaches (a) and/or (b) conformant? I'd like to propose that they are. This ruling would also apply to other similar wording within POSIX.2.

Interpretation for Response

The POSIX locale requires particular message formats for some of the standard utilities. When those standard utilities are invoked in an environment in which the `LC_MESSAGES` category is "C" or "POSIX", the required messages for the POSIX locale must be used. Therefore, implementations that take approach (a) or (b), where the messages are not formatted as required for the POSIX locale, are not conformant. When the invocation environment for the `LC_MESSAGES` category is other than the POSIX locale, and in particular, when none of the `LANG`, `LC_ALL`, or `LC_MESSAGES` environment variables is set to a valid locale name, implementations may choose to use a default error message format that gives additional (or otherwise differently formatted) information. Therefore, imple-

mentations that take approach (b) under those circumstances could be conformant. The standard clearly states the behaviour for message formats and conforming implementations must conform to this.

Rationale for Interpretation

None.