

## IEEE Standards Interpretations for IEEE Std 1003.1™-2001 IEEE Standard for Information Technology - Portable Operating System Interface (POSIX®)

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### Interpretation Request #21

**Topic:** locale **Relevant Sections:** STDOUT

There's an unclarity in the STDOUT section of the "setlocale" utility: <http://www.open-group.org/onlinepubs/007904975/utilities/locale.html>

Here's the relevant text: If locale is invoked without any options or operands, the names and values of the LANG and LC\_\* environment variables described in this volume of IEEE Std 1003.1-2001 shall be written to the standard output, one variable per line, with LANG first, and each line using the following format. Only those variables set in the environment and not overridden by LC\_ALL shall be written using this format: "%s=%s\n", <variable\_name>, <value> The names of those LC\_\* variables associated with locale categories < defined in this volume of IEEE Std 1003.1-2001 that are not set in the environment or are overridden by LC\_ALL shall be written in the following format: "%s=\"%s\"\n", <variable\_name>, <implied value> It is unclear should the value of LANG be output if it's not set in the environment, or if both LANG and LC\_ALL are set in the environment, and it's unclear which format should be used to output LANG.

After some research on different operating systems, I think the intent is to always output the value of the LANG variable (even if unset), regardless of whether LC\_ALL is set or not, using the first format. I suggest to change the text as follows: If locale is invoked without any options or operands, the names and values of the LANG and LC\_\* environment variables described in this volume of IEEE Std 1003.1-2001 shall be written to the standard output, one variable per line, with LANG first, and each line using the following format. The LANG variable, and only those LC\_\* variables set in the environment and not overridden by LC\_ALL shall be written using this format: "%s=%s\n", <variable\_name>, <value> If LANG is not set, it shall be written as: "LANG=\n" The names of those LC\_\* variables associated with locale categories defined in this volume of IEEE

Std 1003.1-2001 that are not set in the environment or are overridden by LC\_ALL shall be written in the following format: "%s=\"\"%s\"\"\n", <variable\_name>, <implied value>

**Interpretation Response**

The standard is unclear on this issue about LANG when it has no value, and no conformance distinction can be made between alternative implementations based on this. This is being referred to the sponsor.

**Rationale for Interpretation**

None.