

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 #49

Topic: Extended tar format **Relevant Sections:** 10.1.1 **Classification:** No change

POSIX.1-1990 Section 10.1.1 Extended tar Format does not make it clear whether implementations are permitted to store extra directories on a tar archive. For example, when archiving “/dev/devicename”, is it permissible for tar to place an entry for “/dev” on the archive? X/Open proposes that it is not permissible for an extra entry to be made on the archive. Only by explicitly specifying the directories should they be placed on the archive. Only by explicit specification can the directory permissions be recorded. Directories created in the course of extracting from an archive will have process environment specified permissions if they were not explicitly put on the archive.

Interpretation Response

The request addresses a point that is outside the scope of IEEE Std 1003.1-1990. IEEE Std 1003.1-1990 specifies the format of tar archives, but makes no requirement of the format-creating utility other than that it be capable of creating conforming archives. As long as the directory entries in the tar archive conform to the format specified for such entries, nothing about the behavior described in the request is in conflict with the requirements of IEEE Std 1003.1-1990.

Rationale for Interpretation

IEEE Std 1003.1-1990, page 169, lines 2-5:

A conforming system shall provide a mechanism to copy files from a medium to the file hierarchy and copy files from the file hierarchy to a medium using the interchange formats described here. This part of ISO/IEC 9945 does not define this mechanism.

The last sentence, above, specifically excludes the format-creating utility from the scope

of the Standard. In the rationale, the authors deferred to ISO/IEC 9945-2 (IEEE Std 1003.2-1993) for the user interface.