

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 #91

Topic: PTHREAD_CANCEL_* symbols required as macros? **Relevant Sections:** p351, ll 158-159,162-163, 18.2.2.2; plus others PASC

Appendix C describes the following macros for threads support to be present in <pthread.h>: PTHREAD_CANCEL_ASYNCHRONOUS PTHREAD_CANCEL_DEFERRED PTHREAD_CANCEL_DISABLE PTHREAD_CANCEL_ENABLE PTHREAD_CREATE_DETACHED PTHREAD_CREATE_JOINABLE PTHREAD_SCOPE_PROCESS PTHREAD_EXPLICIT_SCHED PTHREAD_SCOPE_SYSTEM PTHREAD_INHERIT_SCHED however nowhere in the normative text does it appear to require that these be defined as macros. Is it conforming to define these as enumerated values such as follows? enum { PTHREAD_CREATE_JOINABLE, PTHREAD_CREATE_DETACHED }; enum { PTHREAD_INHERIT_SCHED, PTHREAD_EXPLICIT_SCHED }; enum { PTHREAD_SCOPE_SYSTEM, PTHREAD_SCOPE_PROCESS }; enum { PTHREAD_CANCEL_ENABLE, PTHREAD_CANCEL_DISABLE }; enum { PTHREAD_CANCEL_DEFERRED, PTHREAD_CANCEL_ASYNCHRONOUS };

Interpretation Response

The standard is silent on the issue and either behaviour is conforming. This is being forwarded to the sponsor.

Rationale for Interpretation

Annex C is informative and not part of the standard.

Note to Project Editor (not part of the interpretation)

It is recommended that this issue be clarified in Annex C in a future revision. Forwarded to Interpretations group: 29 June 1998 Proposed Interpretation: 17 Jul 1998 Finalized: February 17 1999