

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 #85

Topic: signal.h and namespace **Relevant Sections:** Subclause 3.3.1, P70 & subclause 3.3.8.1, P80 (sigtimedwait())

POSIX defines the sigtimedwait() function, which takes a const struct timespec * as one of its arguments. This function is declared in the <signal.h> header. However, the synopsis for sigtimedwait() does not specify inclusion of <time.h> which is where the timespec structure is defined. Likewise, the sigtimedwait() description does not state any requirements for defining struct timespec, nor does it allow for the visibility of symbols in <time.h> when including <signal.h>. To include <signal.h> and not define struct timespec will result in compilers generating a warning about a dubious tag declaration for struct timespec. Though POSIX references <time.h> in the Cross-References and See Also sections respectively, and talks about the timespec structure in the text, there is no indication as to how one should go about making this visible.

Add a paragraph after POSIX.1-1996, P70, L50 (description of <signal.h>): Inclusion of the <signal.h> header may make visible symbols allowed by this part of ISO/IEC 9945 to be in the <time.h> header. (This matches the wording used on POSIX.1-1996, P319 for <mqueue.h>.)

Interpretation Response

The standard does not speak to this issue, and as such no conformance distinction can be made between alternative implementations based on this. This is being referred to the sponsor.

Rationale for Interpretation

There appear to be some omissions in the specification. It is recommended that a future revision address this issue. Forwarded to Interpretations group: 26 Feb 1998 Finalized:

30 March 1998