

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

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Interpretation Request #65

Topic: sigaction, SA_NODEFER **Relevant Sections:** XSH sigaction Page: 1364 Line: 42600

The role of the SA_NODEFER flag (XSI extension) is unclear from the standard text, with regards to the resulting thread's signal mask.

In the flag description, it is told that the new signal mask (for the signal handler duration) is made of the old signal mask, plus the sa_mask, and the caught signal is not added (unless it is part of sa_mask).

In the next paragraph, it is told that when the flag is set, the new signal mask is made of the old signal mask, plus only the signal which has been caught (sa_mask is ignored).

I think the first explanation makes more sense, so I would suggest replacing:

This mask is formed by taking the union of the current signal mask and the value of the sa_mask for the signal being delivered [XSI] [Option Start] unless SA_NODEFER or SA_RESETHAND is set, [Option End] and then including the signal being delivered.

with:

This mask is formed by taking the union of the current signal mask and the value of the sa_mask for the signal being delivered, and then including the signal being delivered [XSI] [Option Start] unless SA_NODEFER or SA_RESETHAND is set [Option End].

Interpretation Response #65

The standards states the requirements for SA_DEFER, and conforming implementations must conform to this. However, concerns have been raised about this which are being referred to the sponsor.

Rationale for Interpretation

None.