



INTERNATIONAL STANDARD ISO/IEC 9945-1:2003
TECHNICAL CORRIGENDUM 1

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION
INTERNATIONAL ELECTROTECHNICAL COMMISSION • МЕЖДУНАРОДНАЯ ЭЛЕКТРОТЕХНИЧЕСКАЯ КОМИССИЯ • COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

Information technology — Portable Operating System Interface (POSIX®) —

Part 1: Base Definitions

TECHNICAL CORRIGENDUM 1

Technologies de l'information — Interface pour la portabilité des systèmes (POSIX) —

Partie 1: Définitions de base

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to ISO/IEC 9945-1:2003 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 22, *Programming languages, their environments and system software interfaces*.

1 Scope

This technical corrigendum addresses issues raised in defect reports and interpretation requests submitted up to 14 August 2003, and that meet all of the following criteria:

- a. They are in the scope of the approved International Standard.
- b. They contain no new APIs (functions/utilities), however, they may add enumeration symbols, non-function # defines, and reserve additional namespaces.
- c. They address contradictions between different parts of the International Standard, or add consistency between it and overriding International Standards, or address security-related problems.

2 Changes to ISO/IEC 9945-1

Change Number: XBD/TC1/1 [XBD ERN 20]

On Page: xli Line: "ISO/IEC 8859" Section: Referenced Documents

Add after line starting "Part 10":

"Part 11: Latin/Thai Alphabet"

Add after line starting "Part 15":

"Part 16: Latin Alphabet No. 10"

Change Number: XBD/TC1/2 [XSH ERN 4,XBD ERN 3]

On Page: 25 Line: 932-935 Section: Conformance

Change from:

"If `_POSIX_PRIORITIZED_IO` is supported, then asynchronous I/O operations performed by `aio_read()`, `aio_write()`, and `lio_listio()` shall be submitted at a priority equal to the scheduling priority of the process minus `aiocbp->aio_reqprio`."

To:

"If `_POSIX_PRIORITIZED_IO` is supported, then asynchronous I/O operations performed by `aio_read()`, `aio_write()`, and `lio_listio()` shall be submitted at a priority equal to the scheduling priority equal to a base scheduling priority minus `aiocbp->aio_reqprio`. If Thread Priority Scheduling is not supported then the base scheduling priority is that of the calling process, otherwise the base scheduling priority is that of the calling thread."

Rationale:

The previous wording did not take threads into account.

Change Number: XBD/TC1/3 [XBD ERN 4]

On Page: 48 Line: 1631-1635 Section: 3.93 Child Process

Change From:

"3.93 Child Process

A new process created (by `fork()`, `posix_spawn()`, or `posix_spawnp()`) by a given process. A child process remains the child of the creating process as long as both processes continue to exist. Note: The `fork()`, `posix_spawn()`, and `posix_spawnp()` functions are defined in detail in the System Interfaces volume of IEEE Std 1003.1-2001."

To:

"3.93 Child Process

A new process created (by `fork()`, `posix_spawn()`, `posix_spawnp()`, or `vfork()`) by a given process. A child process remains the child of the creating process as long as both processes continue to exist. Note: The `fork()`, `posix_spawn()`, `posix_spawnp()` and `vfork()` functions are defined in detail in the System Interfaces volume of IEEE Std 1003.1-2001."

Change Number: XBD/TC1/4 [XBD ERN 30]

On Page: 61 Line: 2005-2006 Section: 3.187 Group Database

Change From:

"A system database of implementation-defined format that contains at least the following information for each group ID:"

To:

"A system database that contains at least the following information for each group ID:"

Change Number: XBD/TC1/5 [XBD ERN 7]

On Page: 76 Line: 2433,2440 Section: 3.295 Process Lifetime

In the Section 3.295 Process Lifetime

Change From:

"After a process is created with a fork() function, it is considered active."

To:

"After a process is created by fork(), posix_spawn(), posix_spawnp() or vfork(), it is considered active."

Change From:

"Note: The fork(), wait(), waitid(), and waitpid() functions are defined in detail in the System Interfaces volume of IEEE Std 1003.1-2001."

To:

"Note: The fork(), posix_spawn(), posix_spawnp(), vfork(), wait(), waitid(), and waitpid () functions are defined in detail in the System Interfaces volume of IEEE Std 1003.1-2001."

Change Number: XBD/TC1/6 [XBD ERN 5]

On Page: 76 Line: 2448-2454 Section: 3.297 Process Termination

Change From:

"There are two kinds of process termination:

1. Normal termination occurs by a return from main() or when requested with the exit() or _exit() functions.

2. Abnormal termination occurs when requested by the abort() function or when some signals are received.

Note: The _exit(), abort(), and exit() functions are defined in detail in the System Interfaces volume of IEEE Std 1003.1-2001."

To:

"There are two kinds of process termination:

1. Normal termination occurs by a return from main(), when requested with the exit(), _exit(), or _Exit() functions; or when the last thread in the process terminates by returning from its start function, by calling the pthread_exit() function, or through cancellation.

2. Abnormal termination occurs when requested by the abort() function or when some signals are received.

Note: The _exit(), _Exit(), abort(), and exit() functions are defined in detail in the System Interfaces volume of IEEE Std 1003.1-2001."

Rationale:

The definition does not mention the "passive exit" on termination of the last thread or the _Exit() function.

Change Number: XBD/TC1/7 [XBD ERN 31,32]

On Page: 88 Line: 2778-2779 Section: 3.382 System Console

Change From:

"An implementation-defined device that receives messages sent by the syslog() function, and the fmtmsg() function when the MM_CONSOLE flag is set."

To:

"A device that receives messages sent by the syslog() function, and the fmtmsg() function when the MM_CONSOLE flag is set."

Change Number: XBD/TC1/8 [TC2d5 ERN 4]

On Page: 88 Line: 2783-2796 Section: 3.383 System Databases

Change From:

"An implementation provides two system databases.

The "group database" contains the following information for each group:

1. Group name
2. Numerical group ID
3. List of all users allowed in the group

The "user database" contains the following information for each user:

1. User name
2. Numerical user ID
3. Numerical group ID
4. Initial working directory
5. Initial user program

If the initial user program field is null, the system default is used. If the initial working directory field is null, the interpretation of that field is implementation-defined. These databases may contain other fields that are unspecified by IEEE Std 1003.1-2001."

To:
"An implementation provides two system databases, the "group database" (see also Section 3.187) and the "user database" (see also Section 3.424)."

Change Number: XBD/TC1/9 [XBD ERN 33]

On Page: 88 Line: 2802-2803 Section: 3.385 System Process

Change From:

"An implementation-defined object, other than a process executing an application, that has a process ID."

To:
"An object other than a process executing an application, that is provided by the system and has a process ID."

Change Number: XBD/TC1/10 [TC2d5 ERN 5]

On Page: 89 Line: 2805-2806 Section: 3.386 System Reboot

Change From:

"An implementation-defined sequence of events that may result in the loss of transitory data; that is, data that is not saved in permanent storage."

To:
"An unspecified sequence of events that may result in the loss of transitory data; that is, data that is not saved in permanent storage."

Change Number: XBD/TC1/11 [XBD ERN 36]

On Page: 94 Line: 2939-2940 Section: 3.424 User Database

Change From:

"A system database of implementation-defined format that contains at least the following information for each user ID:"

To:
"A system database that contains at least the following information for each user ID:"

Change Number: XBD/TC1/12 [XBD ERN 28]

On Page: 104 Line: 3222-3223 Section: 4.14

Change From:

"How any changes to the value of seconds since the Epoch are made to align to a desired relationship with the current actual time are made is implementation-defined."

To:
"How any changes to the value of seconds since the Epoch are made to align to a desired relationship with the current actual time is implementation-defined."

Rationale:
This is an editorial change.

Change Number: XBD/TC1/13 [XBD ERN 17]

On Page: 119 Line: 3758 Section: 6.3

Add to the end of the paragraph:

"This standard provides no means of defining a wide character codeset."

Change Number: XBD/TC1/14 [XBD ERN 17]

On Page: 121 Line: 3860-3862,3867-3868,3869 Section: 6.3

Change From:

"Bytes shall be treated as unsigned octets, and carry shall be propagated between the bytes as necessary to represent the range. For example, the line:"

To:
"Bytes shall be treated as unsigned octets, and carry shall be propagated between the bytes as necessary to represent the range. However, because this causes a null byte in the second or subsequent bytes of a character, such a declaration should not be specified. For example, the line:"

Change From:

<j0103> \d130\d0
<j0104> \d130\d1