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(POSIX®)*
(Partie 4: Rationnel)

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IEEE Std 1003.1™-2001
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and IEEE Std 1003.2-1992)

The Open Group Technical Standard
Base Specifications, Issue 6

Information technology—Portable Operating System Interface (POSIX®)

Part 4: Rationale

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IEEE

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Abstract

This standard defines a standard operating system interface and environment, including a command interpreter (or “shell”), and common utility programs to support applications portability at the source code level. It is the single common revision to IEEE Std 1003.1-1996, IEEE Std 1003.2-1992, and the Base Specifications of The Open Group Single UNIX[®]† Specification, Version 2. This standard is intended to be used by both applications developers and system implementors and comprises four major components (each in an associated volume):

- General terms, concepts, and interfaces common to all volumes of this standard, including utility conventions and C-language header definitions, are included in the Base Definitions volume.
- Definitions for system service functions and subroutines, language-specific system services for the C programming language, function issues, including portability, error handling, and error recovery, are included in the System Interfaces volume.
- Definitions for a standard source code-level interface to command interpretation services (a “shell”) and common utility programs for application programs are included in the Shell and Utilities volume.
- Extended rationale that did not fit well into the rest of the document structure, containing historical information concerning the contents of this standard and why features were included or discarded by the standard developers, is included in the Rationale (Informative) volume.

The following areas are outside the scope of this standard:

- Graphics interfaces
- Database management system interfaces
- Record I/O considerations
- Object or binary code portability
- System configuration and resource availability

This standard describes the external characteristics and facilities that are of importance to applications developers, rather than the internal construction techniques employed to achieve these capabilities. Special emphasis is placed on those functions and facilities that are needed in a wide variety of commercial applications.

Keywords

application program interface (API), argument, asynchronous, basic regular expression (BRE), batch job, batch system, built-in utility, byte, child, command language interpreter, CPU, extended regular expression (ERE), FIFO, file access control mechanism, input/output (I/O), job control, network, portable operating system interface (POSIX[®]†), parent, shell, stream, string, synchronous, system, thread, X/Open System Interface (XSI)

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ISO/IEC 9945-4 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 22, *Programming languages, their environments and system software interfaces*.

This first edition of ISO/IEC 9945-4, together with ISO/IEC 9945-1, ISO/IEC 9945-2 and ISO/IEC 9945-3, cancels and replaces ISO/IEC 9945-1:1996 and ISO/IEC 9945-2:1993, which have been technically revised.

ISO/IEC 9945 consists of the following parts, under the general title *Information technology — Portable Operating System Interface (POSIX®)*:

- *Part 1: Base Definitions*
- *Part 2: System Interfaces*
- *Part 3: Shell and Utilities*
- *Part 4: Rationale*



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Contents

Part	A	Base Definitions.....	1
Appendix	A	Rationale for Base Definitions.....	3
	A.1	Introduction	3
	A.1.1	Scope.....	3
	A.1.2	Conformance	5
	A.1.3	Normative References	5
	A.1.4	Terminology	5
	A.1.5	Portability	8
	A.1.5.1	Codes.....	8
	A.1.5.2	Margin Code Notation.....	8
	A.2	Conformance	9
	A.2.1	Implementation Conformance.....	9
	A.2.1.1	Requirements.....	9
	A.2.1.2	Documentation.....	9
	A.2.1.3	POSIX Conformance	10
	A.2.1.4	XSI Conformance	10
	A.2.1.5	Option Groups.....	11
	A.2.1.6	Options.....	12
	A.2.2	Application Conformance.....	12
	A.2.2.1	Strictly Conforming POSIX Application.....	12
	A.2.2.2	Conforming POSIX Application.....	12
	A.2.2.3	Conforming POSIX Application Using Extensions.....	12
	A.2.2.4	Strictly Conforming XSI Application	12
	A.2.2.5	Conforming XSI Application Using Extensions.....	12
	A.2.3	Language-Dependent Services for the C Programming Language.....	13
	A.2.4	Other Language-Related Specifications.....	13
	A.3	Definitions	13
	A.4	General Concepts.....	33
	A.4.1	Concurrent Execution.....	33
	A.4.2	Directory Protection	33
	A.4.3	Extended Security Controls.....	33
	A.4.4	File Access Permissions	33
	A.4.5	File Hierarchy	34
	A.4.6	Filenames.....	34
	A.4.7	File Times Update.....	35
	A.4.8	Host and Network Byte Order.....	36
	A.4.9	Measurement of Execution Time.....	36
	A.4.10	Memory Synchronization.....	36
	A.4.11	Pathname Resolution	38
	A.4.12	Process ID Reuse	39
	A.4.13	Scheduling Policy.....	39

A.4.14	Seconds Since the Epoch	39
A.4.15	Semaphore.....	40
A.4.16	Thread-Safety.....	40
A.4.17	Tracing.....	40
A.4.18	Treatment of Error Conditions for Mathematical Functions	41
A.4.19	Treatment of NaN Arguments for Mathematical Functions	41
A.4.20	Utility.....	41
A.4.21	Variable Assignment	41
A.5	File Format Notation.....	41
A.6	Character Set.....	42
A.6.1	Portable Character Set.....	42
A.6.2	Character Encoding.....	42
A.6.3	C Language Wide-Character Codes	42
A.6.4	Character Set Description File.....	42
A.6.4.1	State-Dependent Character Encodings	42
A.7	Locale.....	45
A.7.1	General.....	45
A.7.2	POSIX Locale	45
A.7.3	Locale Definition.....	45
A.7.3.1	LC_CTYPE.....	46
A.7.3.2	LC_COLLATE.....	47
A.7.3.3	LC_MONETARY.....	49
A.7.3.4	LC_NUMERIC.....	50
A.7.3.5	LC_TIME.....	50
A.7.3.6	LC_MESSAGES.....	51
A.7.4	Locale Definition Grammar.....	52
A.7.4.1	Locale Lexical Conventions.....	52
A.7.4.2	Locale Grammar.....	52
A.7.5	Locale Definition Example.....	52
A.8	Environment Variables.....	55
A.8.1	Environment Variable Definition	55
A.8.2	Internationalization Variables.....	56
A.8.3	Other Environment Variables.....	57
A.9	Regular Expressions.....	58
A.9.1	Regular Expression Definitions	58
A.9.2	Regular Expression General Requirements.....	59
A.9.3	Basic Regular Expressions	60
A.9.3.1	BREs Matching a Single Character or Collating Element.....	60
A.9.3.2	BRE Ordinary Characters.....	60
A.9.3.3	BRE Special Characters.....	60
A.9.3.4	Periods in BREs.....	60
A.9.3.5	RE Bracket Expression	60
A.9.3.6	BREs Matching Multiple Characters.....	62
A.9.3.7	BRE Precedence	62
A.9.3.8	BRE Expression Anchoring.....	62
A.9.4	Extended Regular Expressions	63
A.9.4.1	EREs Matching a Single Character or Collating Element.....	63
A.9.4.2	ERE Ordinary Characters.....	63

A.9.4.3	ERE Special Characters.....	63
A.9.4.4	Periods in EREs.....	63
A.9.4.5	ERE Bracket Expression.....	64
A.9.4.6	EREs Matching Multiple Characters.....	64
A.9.4.7	ERE Alternation.....	64
A.9.4.8	ERE Precedence	64
A.9.4.9	ERE Expression Anchoring.....	64
A.9.5	Regular Expression Grammar.....	64
A.9.5.1	BRE/ERE Grammar Lexical Conventions.....	64
A.9.5.2	RE and Bracket Expression Grammar	65
A.9.5.3	ERE Grammar.....	65
A.10	Directory Structure and Devices	65
A.10.1	Directory Structure and Files	65
A.10.2	Output Devices and Terminal Types	65
A.11	General Terminal Interface	66
A.11.1	Interface Characteristics	67
A.11.1.1	Opening a Terminal Device File	67
A.11.1.2	Process Groups.....	67
A.11.1.3	The Controlling Terminal.....	68
A.11.1.4	Terminal Access Control	68
A.11.1.5	Input Processing and Reading Data.....	69
A.11.1.6	Canonical Mode Input Processing	69
A.11.1.7	Non-Canonical Mode Input Processing.....	69
A.11.1.8	Writing Data and Output Processing	70
A.11.1.9	Special Characters.....	70
A.11.1.10	Modem Disconnect.....	70
A.11.1.11	Closing a Terminal Device File	70
A.11.2	Parameters that Can be Set	70
A.11.2.1	The <code>termios</code> Structure.....	70
A.11.2.2	Input Modes.....	70
A.11.2.3	Output Modes.....	71
A.11.2.4	Control Modes.....	71
A.11.2.5	Local Modes	71
A.11.2.6	Special Control Characters	71
A.12	Utility Conventions.....	72
A.12.1	Utility Argument Syntax.....	72
A.12.2	Utility Syntax Guidelines	73
A.13	Headers	75
A.13.1	Format of Entries.....	75

Part	B	System Interfaces.....	77
Appendix	B	Rationale for System Interfaces.....	79
	B.1	Introduction.....	79
	B.1.1	Scope.....	79
	B.1.2	Conformance.....	79
	B.1.3	Normative References.....	79
	B.1.4	Change History.....	79
	B.1.5	Terminology.....	85
	B.1.6	Definitions.....	85
	B.1.7	Relationship to Other Formal Standards.....	85
	B.1.8	Portability.....	85
	B.1.8.1	Codes.....	85
	B.1.9	Format of Entries.....	85
	B.2	General Information.....	86
	B.2.1	Use and Implementation of Functions.....	86
	B.2.2	The Compilation Environment.....	87
	B.2.2.1	POSIX.1 Symbols.....	87
	B.2.2.2	The Name Space.....	88
	B.2.3	Error Numbers.....	91
	B.2.3.1	Additional Error Numbers.....	95
	B.2.4	Signal Concepts.....	95
	B.2.4.1	Signal Generation and Delivery.....	96
	B.2.4.2	Realtime Signal Generation and Delivery.....	98
	B.2.4.3	Signal Actions.....	101
	B.2.4.4	Signal Effects on Other Functions.....	104
	B.2.5	Standard I/O Streams.....	104
	B.2.5.1	Interaction of File Descriptors and Standard I/O Streams.....	104
	B.2.5.2	Stream Orientation and Encoding Rules.....	104
	B.2.6	STREAMS.....	104
	B.2.6.1	Accessing STREAMS.....	105
	B.2.7	XSI Interprocess Communication.....	105
	B.2.7.1	IPC General Information.....	105
	B.2.8	Realtime.....	106
	B.2.8.1	Realtime Signals.....	111
	B.2.8.2	Asynchronous I/O.....	113
	B.2.8.3	Memory Management.....	116
	B.2.8.4	Process Scheduling.....	129
	B.2.8.5	Clocks and Timers.....	135
	B.2.9	Threads.....	151
	B.2.9.1	Thread-Safety.....	164
	B.2.9.2	Thread IDs.....	167
	B.2.9.3	Thread Mutexes.....	168
	B.2.9.4	Thread Scheduling.....	168
	B.2.9.5	Thread Cancellation.....	172
	B.2.9.6	Thread Read-Write Locks.....	176
	B.2.9.7	Thread Interactions with Regular File Operations.....	178
	B.2.10	Sockets.....	178

B.2.10.1	Address Families.....	178
B.2.10.2	Addressing	178
B.2.10.3	Protocols	178
B.2.10.4	Routing.....	178
B.2.10.5	Interfaces.....	178
B.2.10.6	Socket Types.....	178
B.2.10.7	Socket I/O Mode.....	178
B.2.10.8	Socket Owner.....	179
B.2.10.9	Socket Queue Limits	179
B.2.10.10	Pending Error.....	179
B.2.10.11	Socket Receive Queue.....	179
B.2.10.12	Socket Out-of-Band Data State	179
B.2.10.13	Connection Indication Queue	179
B.2.10.14	Signals	179
B.2.10.15	Asynchronous Errors	179
B.2.10.16	Use of Options.....	179
B.2.10.17	Use of Sockets for Local UNIX Connections.....	179
B.2.10.18	Use of Sockets over Internet Protocols.....	179
B.2.10.19	Use of Sockets over Internet Protocols Based on IPv4.....	179
B.2.10.20	Use of Sockets over Internet Protocols Based on IPv6.....	179
B.2.11	Tracing.....	180
B.2.11.1	Objectives	180
B.2.11.2	Trace Model.....	185
B.2.11.3	Trace Programming Examples.....	190
B.2.11.4	Rationale on Trace for Debugging.....	198
B.2.11.5	Rationale on Trace Event Type Name Space.....	198
B.2.11.6	Rationale on Trace Events Type Filtering	200
B.2.11.7	Tracing, pthread API.....	202
B.2.11.8	Rationale on Triggering.....	203
B.2.11.9	Rationale on Timestamp Clock.....	203
B.2.11.10	Rationale on Different Overrun Conditions.....	204
B.2.12	Data Types.....	204
B.3	System Interfaces	207
B.3.1	Examples for Spawn.....	207
Part C	Shell and Utilities.....	217
Appendix C	Rationale for Shell and Utilities	219
C.1	Introduction	219
C.1.1	Scope.....	219
C.1.2	Conformance	219
C.1.3	Normative References	219
C.1.4	Change History	219
C.1.5	Terminology	220
C.1.6	Definitions.....	220
C.1.7	Relationship to Other Documents.....	220
C.1.7.1	System Interfaces.....	220
C.1.7.2	Concepts Derived from the ISO C Standard.....	221

C.1.8	Portability	221
C.1.8.1	Codes	221
C.1.9	Utility Limits	222
C.1.10	Grammar Conventions	224
C.1.11	Utility Description Defaults	225
C.1.12	Considerations for Utilities in Support of Files of Arbitrary Size ..	228
C.1.13	Built-In Utilities	229
C.2	Shell Command Language	230
C.2.1	Shell Introduction	230
C.2.2	Quoting	231
C.2.2.1	Escape Character (Backslash)	231
C.2.2.2	Single-Quotes	231
C.2.2.3	Double-Quotes	231
C.2.3	Token Recognition	232
C.2.3.1	Alias Substitution	233
C.2.4	Reserved Words	233
C.2.5	Parameters and Variables	234
C.2.5.1	Positional Parameters	234
C.2.5.2	Special Parameters	234
C.2.5.3	Shell Variables	235
C.2.6	Word Expansions	236
C.2.6.1	Tilde Expansion	237
C.2.6.2	Parameter Expansion	238
C.2.6.3	Command Substitution	238
C.2.6.4	Arithmetic Expansion	239
C.2.6.5	Field Splitting	241
C.2.6.6	Pathname Expansion	241
C.2.6.7	Quote Removal	241
C.2.7	Redirection IEC 9945.4:2002	241
C.2.7.1	Redirecting Input	243
C.2.7.2	Redirecting Output IEC 9945.4:2002	243
C.2.7.3	Appending Redirected Output	243
C.2.7.4	Here-Document	243
C.2.7.5	Duplicating an Input File Descriptor	243
C.2.7.6	Duplicating an Output File Descriptor	243
C.2.7.7	Open File Descriptors for Reading and Writing	243
C.2.8	Exit Status and Errors	243
C.2.8.1	Consequences of Shell Errors	243
C.2.8.2	Exit Status for Commands	243
C.2.9	Shell Commands	244
C.2.9.1	Simple Commands	244
C.2.9.2	Pipelines	246
C.2.9.3	Lists	247
C.2.9.4	Compound Commands	248
C.2.9.5	Function Definition Command	249
C.2.10	Shell Grammar	251
C.2.10.1	Shell Grammar Lexical Conventions	252
C.2.10.2	Shell Grammar Rules	252

C.2.11	Signals and Error Handling	252
C.2.12	Shell Execution Environment	252
C.2.13	Pattern Matching Notation	252
C.2.13.1	Patterns Matching a Single Character	252
C.2.13.2	Patterns Matching Multiple Characters	253
C.2.13.3	Patterns Used for Filename Expansion	253
C.2.14	Special Built-In Utilities	254
C.3	Batch Environment Services and Utilities	254
C.3.1	Batch General Concepts	257
C.3.2	Batch Services	259
C.3.3	Common Behavior for Batch Environment Utilities	260
C.4	Utilities	260
Part D	Portability Considerations	265
Appendix D	Portability Considerations (Informative)	267
D.1	User Requirements	267
D.1.1	Configuration Interrogation	268
D.1.2	Process Management	268
D.1.3	Access to Data	268
D.1.4	Access to the Environment	268
D.1.5	Access to Determinism and Performance Enhancements	268
D.1.6	Operating System-Dependent Profile	268
D.1.7	I/O Interaction	268
D.1.8	Internationalization Interaction	269
D.1.9	C-Language Extensions	269
D.1.10	Command Language	269
D.1.11	Interactive Facilities	269
D.1.12	Accomplish Multiple Tasks Simultaneously	269
D.1.13	Complex Data Manipulation	269
D.1.14	File Hierarchy Manipulation	269
D.1.15	Locale Configuration	269
D.1.16	Inter-User Communication	270
D.1.17	System Environment	270
D.1.18	Printing	270
D.1.19	Software Development	270
D.2	Portability Capabilities	270
D.2.1	Configuration Interrogation	271
D.2.2	Process Management	271
D.2.3	Access to Data	272
D.2.4	Access to the Environment	272
D.2.5	Bounded (Realtime) Response	273
D.2.6	Operating System-Dependent Profile	273
D.2.7	I/O Interaction	273
D.2.8	Internationalization Interaction	273
D.2.9	C-Language Extensions	274
D.2.10	Command Language	274
D.2.11	Interactive Facilities	274