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Information technology — Portable Common Tool Environment (PCTE) —

Part 2: C programming language binding

*Technologies de l'information — Environnement d'outil courant
portable (PCTE) —*

Partie 2: Interface de programmation en langage de programmation C



Contents

1 Scope	1
2 Conformance	1
3 Normative references	1
4 Definitions	2
5 Formal notations	2
6 Outline of the Standard	2
7 Binding strategy	2
7.1 C programming language standard	2
7.2 General principles	3
7.3 Sets and sequences	3
7.4 Character strings	4
7.5 Memory allocation	4
7.6 References and names	4
7.7 Operation return values	5
7.8 Error conditions	5
7.9 Identifiers	5
7.10 Implementation limits	5
8 Datatype mapping	6
8.1 Mapping of PCTE datatypes to LI datatypes	6
8.1.1 Mapping of predefined PCTE datatypes	6
8.1.2 Mapping of private PCTE datatypes	7
8.1.3 Mapping of complex PCTE datatypes	8
8.1.4 New LI datatype generators	8
8.2 Mapping of LI datatypes to C datatypes	9
8.2.1 LI datatype boolean	9
8.2.2 LI datatype pcte-integer	9
8.2.3 LI datatype pcte-natural	10
8.2.4 LI datatype pcte-float	11
8.2.5 LI datatype pcte-time	12
8.2.6 LI datatype pcte-text	13

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8.2.7	LI datatype octet	14
8.2.8	LI enumerated datatype pcte-xxx	14
8.2.9	LI private datatypes	15
8.2.10	LI datatype generator pcte-sequence	15
8.2.11	LI datatype pcte-string	17
8.2.12	LI datatype generator bounded-set	18
8.2.13	LI datatype generator choice	19
8.2.14	LI datatype record	20
8.3	Private datatypes	21
8.4	References and names	22
8.5	C private type Pcte_sequence	23
8.5.1	Operations on sequences	27
8.5.2	Error conditions for sequence operators	30
8.6	Deriving C function semantics from the abstract specification	30
8.7	Headers	31
8.7.1	The global PCTE header	32
8.7.2	The PCTE basic type header	32
8.7.3	The PCTE sequence header	33
9	Object management	36
9.1	Object management datatypes	37
9.2	Link operations	39
9.3	Object operations	43
9.4	Version operations	49
10	Schema management	51
10.1	Schema management datatypes	51
10.2	Update operations	53
10.3	Usage operations	59
10.4	Working schema operations	62
11	Volumes, devices, and archives	66
11.1	Volume, device, and archive datatypes	66
11.2	Volume, device, and archive operations	67
11.3	Clusters	69
12	Files, pipes, and devices	70
12.1	File, pipe, and device datatypes	70
12.2	File, pipe, and device operations	71
13	Process execution	73
13.1	Process execution datatypes	74
13.2	Process execution operations	74
13.3	Security operations	78
13.4	Profiling operations	79

13.5	Monitoring operations	79
14	Message queues	80
14.1	Message queue datatypes	80
14.2	Message queue operations	81
15	Notification	84
15.1	Notification datatypes	84
15.2	Notification operations	84
16	Concurrency and integrity control	85
16.1	Concurrency and integrity control datatypes	85
16.2	Concurrency and integrity control operations	85
17	Replication	86
17.1	Replication datatypes	86
17.2	Replication operations	87
18	Network connection	88
18.1	Network connection datatypes	88
18.2	Network connection operations	89
18.3	Foreign system operations	91
18.4	Time operations	91
19	Discretionary security	91
19.1	Discretionary security datatypes	92
19.2	Discretionary access control operations	94
19.3	Discretionary security administration operations	94
20	Mandatory security	96
20.1	Mandatory security datatypes	96
20.2	Mandatory security operations	96
20.3	Mandatory security administration operations	98
20.4	Mandatory security operations for processes	99
21	Auditing	100
21.1	Auditing datatypes	100
21.2	Auditing operations	103
22	Accounting	105
22.1	Accounting datatypes	105
22.2	Accounting administration operations	107
22.3	Consumer identity operations	109
23	References	109
23.1	Reference datatypes	109

23.2 Object reference operations	110
23.3 Link reference operations	112
23.4 Type reference operations	114
24 Limits	115
24.1 Implementation limit datatypes	115
24.2 Implementation limit operations	117
25 Error conditions	117
25.1 Error condition datatypes	117
25.2 Error condition operations	124
Annex A - The object orientation module	125
Index of abstract operations	130
Index of C subprograms	136
Index of C datatypes	143

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 13719-2 was prepared by ECMA (as Standard ECMA-158) and was adopted, under a special “fast-track procedure”, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

This second edition cancels and replaces the first edition (ISO/IEC 13719-2:1995), which has been technically revised.

ISO/IEC 13719 consists of the following parts, under the general title *Information technology - Portable Common Tool Environment (PCTE)*:

- *Part 1: Abstract specification*
- *Part 2: C programming language binding*
- *Part 3: Ada programming language binding*
- *Part 4: IDL binding (Interface Definition Language)*

Annex A forms an integral part of this part of ISO/IEC 13719.

Information technology — Portable Common Tool Environment (PCTE) —

Part 2:

C programming language binding

1 Scope

This part of ISO/IEC 13719 defines the binding of the Portable Common Tool Environment (PCTE), as specified in ISO/IEC 13719-1, to the C programming language.

A number of features are not completely defined in ISO/IEC 13719-1, some freedom being allowed to the implementor. Some of these features are specified as implementation limits. Some constraints are placed on these implementation limits by this part of ISO/IEC 13719. These constraints are specified in clause 24, Implementation Limits.

PCTE is an interface to a set of facilities that forms the basis for constructing environments supporting systems engineering projects. These facilities are designed particularly to provide an infrastructure for programs which may be part of such environments. Such programs, which are used as aids to system development, are often referred to as tools.

2 Conformance

An implementation of PCTE conforms to this part of ISO/IEC 13719 if it conforms to 2.2 of ISO/IEC 13719-1, where the binding referred to there is taken to be the C language binding defined in clauses 1 to 5 and 8 to 25 of this part of ISO/IEC 13719. All other parts of this part of ISO/IEC 13719 are provided as assistance to the reader and are not normative.

The C language binding defined in this part of ISO/IEC 13719 conforms to 2.1 of ISO/IEC 13719-1.

3 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 13719. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO/IEC 13719 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO/IEC 13719-1:1998,	<i>Information technology - Portable Common Tool Environment (PCTE) - Part 1: Abstract specification.</i>
ISO/IEC 13719-3:1998,	<i>Information technology - Portable Common Tool Environment (PCTE) - Part 3: Ada programming language binding.</i>
ISO 8601:1988,	<i>Data elements and interchange formats - Information interchange - Representation of dates and times.</i>
ISO 9899:1990,	<i>Programming languages - C.</i>

ISO/IEC TR 10182:1993, *Information technology - Programming languages, their environments and system software interfaces - Guidelines for language bindings.*

ISO/IEC 11404:1996, *Information technology - Programming languages, their environments and system software interfaces - Language-independent datatypes.*