Product Standard

Operating System and Languages: C Language

The Open Group

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NAME

C Language

LABEL FOR LOGO

No label.

DESCRIPTION

ISO C and X/Open Common Usage C Language definitions. Common Usage C is retained for compatibility with XPG3 applications. ISO C is replacing Common Usage C over time.

CONFORMANCE REQUIREMENTS

Human-Computer Interface

Not applicable.

Portability Interface

X/Open Common Usage C, defined in Programming Languages, Issue 3¹, Chapters 1 to 4, C Language.

ISO C, defined in ISO/IEC 9899: 1990 (C Language).²

Programming Language Environment

Not applicable.

The referenced specifications define the ISO C and X/Open Common Usage C dialects.

Interoperability

Data Interchange Formats

None.

X/Open Specification, 1988, 1989, February 1992, Programming Languages, Issue 3 (ISBN: 1-872630-39-1, C214); this specification was formerly X/Open Portability Guide, Volume 4, August 1988 (ISBN: 0-13-685868-6, XO/XPG/89/004).

^{2.} ISO/IEC 9899:1990, Programming Languages — C (technically identical to ANSI standard X3.159-1989).

 Communications Interfaces and Protocols None.

OPERATIONAL ENVIRONMENT

Not applicable.

PORTABILITY ENVIRONMENT

XPG3 Internationalized System Calls and Libraries, Internationalized System Calls and Libraries, Internationalized System Calls and Libraries Extended, or Internationalized System Calls and Libraries Extended V2.

OVERRIDING STANDARDS

The X/Open specification of ISO C is a direct reference to ISO/IEC 9899:1990 (C Language). Deference is therefore not applicable. X/Open Common Usage C does not defer to any formal standard.

INDICATORS OF COMPLIANCE

Support for both ISO C and Common Usage C is a mandatory requirement for conformance to this Product Standard, and there are separate Indicators of Compliance for each of these language dialects as defined below:

• ISO C

Any of the following:

- Current NIST certificate of ANSI/ISO C-language validation.
- Current entry in the NIST register of validated language processors for ANSI/ISO C Language indicating no non-conformities.
- Current Certificate of ANSI/ISO C-language validation issued by a member of the GLATC European testing agreement group registered under ECITC.
- A Test Report from a currently authorized release of either the Perennial ANSI C Validation Suite or the Plum-Hall C Validation Suite, together with the checklist of Implementation-defined Features.
- Common Usage C

A Test Report from a currently authorized release of the VSX C Language test suite.

MIGRATION

For a description of the migration path to ISO C, refer to the generally available literature.

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