Product Standard

General Interworking:
Transport Service (XTI)

The Open Group

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Document Number: X98GS

Published in the U.K. by The Open Group, January 1998.

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Product Standard

NAME

Transport Service (XTI)

LABEL FOR LOGO

No label.

DESCRIPTION

This Product Standard provides a single programming interface to a variety of transport services: OSI, TCP/IP, UDP/IP, NetBIOS. It thereby facilitates the writing of distributed applications, independent of network technology.

Although a number of the defined features do depend to a greater or lesser extent on the underlying protocol, these are clearly described in the referenced specifications, which also include guidance on writing protocol-independent application software.

This is an update to the XPG3 XTI Transport Service Product Standard, with modifications and extensions, particularly in the area of option management, and the addition of support for NetBIOS.

CONFORMANCE REQUIREMENTS

Human-Computer Interface

Not applicable.

Portability Interface

X/Open XTI, Version 2 Specification,[1] or Chapters 1 to 7 of the X/Open Networking Services, Issue 4 Specification,[2] which is technically identical except for the addition concerned with function prototypes and namespace reservations identified by UX shading. Support for the UX shaded definitions is mandatory if the Portability Environment is Internationalized System Calls and Libraries Extended, but optional otherwise.

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1. CAE Specification, September 1993, X/Open Transport Interface (XTI), Version 2 (ISBN: 1-872630-97-9, C318).
2. CAE Specification, August 1994, Networking Services, Issue 4 (ISBN: 1-85912-049-0, C438).

Programming Language Environment

C Language. If the Portability Environment is Internationalized System Calls and Libraries Extended, the dialect is ISO C, in which case ISO C source programs invoking the services of this Product Standard must be supported by the registered product.

Interoperability

- Data Interchange Formats

  None.

- Communications Interfaces and Protocols

  Products conforming to the Transport Service (XTI) Product Standard shall be available in configurations that support at least one of the following:

  - ISO/IEC ISP 10608-2: 1992 (Profile TA51)[3]
  - ISO/IEC ISP 10608-5: 1992 (Profile TA1111)[4]
  - ISO/IEC ISP 10609-6: 1992 (Profile TC1111)[5]
  - ISO/IEC ISP 10609-7: 1992 (Profile TD1111)[6]
  - TCP/IP
  - UDP/IP

  Guidance on the Internet Protocol Suite may be found in the Guide to the Internet Protocol Suite.[7]

  Support for other protocol profiles or protocols, for example, NetBIOS, can be declared in the Conformance Statement.

OPERATIONAL ENVIRONMENT

Not applicable.

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3. ISO/IEC ISP 10608-2: 1992, Information Technology — International Standardized Profiles TAnnnn — Connection-mode Transport Service over Connectionless-mode Network Service — Part 2: TA51 Profile, including Subnetwork-dependent Requirements for CSMA/CD Local Area Networks (LANs).
4. ISO/IEC ISP 10608-5: 1992, Information Technology — International Standardized Profiles TAnnnn — Connection-mode Transport Service over Connectionless-mode Network Service — Part 5: Definition of Profiles TA1111/TA1121 including Subnetwork-dependent Requirements for X.25 Packet-switched Data Network using Virtual Calls.
5. ISO/IEC ISP 10609-6: 1992, Information Technology — International Standardized Profiles TB, TC, TD, TE — Connection-mode Transport Service over Connection-mode Network Service — Part 6: Definition of Profiles TC1111/TC1121.
6. ISO/IEC ISP 10609-7: 1992, Information Technology — International Standardized Profiles TB, TC, TD, TE — Connection-mode Transport Service over Connection-mode Network Service — Part 7: Definition of Profiles TD1111/TD1121.
7. Guide, April 1991, Guide to the Internet Protocol Suite (ISBN: 1-872630-08-1, G110).

PORTABILITY ENVIRONMENT

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

OVERRIDING STANDARDS

None.

INDICATORS OF COMPLIANCE

A Test Report from a currently authorized release of the VST Test Suite.

MIGRATION

Mainly upwards-compatible from the XPG3 XTI Transport Service Product Standard, except in the area of option management where there were extensive revisions. For the details, see the revision history given in the Preface of the referenced specifications.