Product Standard

General Interworking:
Transport Service (XTI) V2

The Open Group
Product Standard

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Any comments relating to the material contained in this document may be submitted to:

The Open Group
Apex Plaza
Forbury Road
Reading
Berkshire RG1 1AX
U.K.

Or by email to:
OGSpecs@opengroup.org
Product Standard

NAME
Transport Service (XTI) V2

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. It is an enhancement to the Transport Service (XTI) Product Standard.

The enhancements are:

• Changes to remove any hardware data-length dependencies or restrictions. This is known as Data Size Neutral (or N-bit clean). It is of particular relevance to the ongoing move to 64-bit CPUs.

• A number of other improvements including some that are incorporated in the extensions to IEEE 1003.1 being defined by the IEEE P1003.1g project. At the time of publication of the Networking Services, Issue 5 Specification,¹ the P1003.1g extensions to IEEE 1003.1 were not yet ratified by the IEEE, and attempts were being made to align them and the Networking Services, Issue 5 Specification.

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 specification, which also includes guidance on writing protocol-independent application software.

CONFORMANCE REQUIREMENTS

Human-Computer Interface
Not applicable.

Portability Interface
Networking Services, Issue 5 Specification, Chapters 1 to 7 inclusive.

Programming Language Environment

C Language. If the Portability Environment is Internationalized System Calls and Libraries Extended or Internationalized System Calls and Libraries Extended V2, 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) V2 Product Standard shall be available in configurations that support at least one of the following:


  - TCP/IP
  - UDP/IP

  Guidance on the Internet Protocol Suite may be found in the Guide to the Internet Protocol Suite.\(^2\)

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

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OPERATIONAL ENVIRONMENT
Not applicable.

PORTABILITY ENVIRONMENT
Internationalized System Calls and Libraries, Internationalized System Calls and Libraries Extended, or Internationalized System Calls and Libraries Extended V2.

OVERRIDING STANDARDS
None.

INDICATORS OF COMPLIANCE
A Test Report from a currently authorized release of the VST5 Test Suite.

MIGRATION
Mainly upwards-compatible from Transport Service (XTI). There are a few minor incompatibilities arising from alignment with the emerging formal standard and the Data Size Neutral enhancements.