Product Standard

General Interworking:
Sockets V2

The Open Group

Copyright © January 1998, The Open Group

All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owners.

Motif,® OSF/1,® UNIX,® and the "X Device"® are registered trademarks and IT DialTone™ and The Open Group™ are trademarks of The Open Group in the U.S. and other countries.

Product Standard

General Interworking: Sockets V2

Document Number: X98GQ

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

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

Sockets V2

LABEL FOR LOGO

No label.

DESCRIPTION

This Product Standard provides applications with the sockets interface to the underlying communications system. It is an enhancement to the Sockets 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 are 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.

Note that branding is only available in association with an Internationalized System Calls and Libraries Extended or an Internationalized System Calls and Libraries Extended V2 Portability Environment.

CONFORMANCE REQUIREMENTS

Human-Computer Interface

Not applicable.

1. CAE Specification, January 1997, Networking Services, Issue 5 (ISBN: 1-85912-165-9, C523).

Portability Interface

Networking Services, Issue 5 Specification, Chapters 1 and 8 to 11.

Programming Language Environment

C Language. Dialect ISO C. 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 Sockets V2 Product Standard shall be available in configurations that support the following socket domains:

  — AF_INET, with at least the SOCK_STREAM and SOCK_DGRAM socket types

  — AF_UNIX, with at least the SOCK_STREAM socket type

  Guidance on the Internet Protocol Suite, required for support of AF_INET domain sockets, may be found in the Guide to the Internet Protocol Suite.[2]

OPERATIONAL ENVIRONMENT

Not applicable.

PORTABILITY ENVIRONMENT

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 VSU5 Sockets Test Suite.

MIGRATION

Mainly upwards-compatible from the Sockets Product Standard. There are a few minor incompatibilities arising from alignment with the emerging formal standard and the Data Size Neutral enhancements.

---

2. Guide, April 1991, Guide to the Internet Protocol Suite (ISBN: 1-872630-08-1, G110).