Product Standard

General Interworking:
Network File System

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: Network File System

Document Number: X98GN

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

Network File System

LABEL FOR LOGO

No label.

DESCRIPTION

This Product Standard provides an application program acting as a client in a client/server configuration with transparent access to files held on the remote server. Conformant systems must also be able to act as the server and provide the necessary remote file system support.

CONFORMANCE REQUIREMENTS

For a system to be registered as conformant to this Product Standard the Conformance Statement shall state the way in which the abstract definitions of the management services and objects are realized by the system. The abstract definitions are in the XNFS, Issue 4 Specification[1], Section 2.4, XNFS Objects, Section 2.5, XNFS Server Operations, and Section 2.6, XNFS Client Operations.

Human-Computer Interface

Not applicable.

Portability Interface

File I/O interfaces as defined in the chosen Portability Environment and the corresponding Commands and Utilities Product Standards, and as modified by the XNFS, Issue 4 Specification.

Programming Language Environment

That of the chosen Portability Environment.

---

1. CAE Specification, October 1992, Protocols for X/Open Interworking: XNFS, Issue 4 (ISBN: 1-872630-66-9, C218).

Interoperability

- Data Interchange Formats

  None.

- Communications Interfaces and Protocols

  XNFS, Issue 4 Specification, Section 1.4, Protocol Stacks and Conformance, defines the conformance requirements.

  Conforming implementations shall be available in a configuration in which the NFS protocols are carried over a UDP/IP protocol stack as required by the XNFS, Issue 4 Specification, Chapter 5, RPC Interface to UDP Transport Services.

  Additional guidance on the Internet Protocol Suite may be found in the Guide to the Internet Protocol Suite.[2]

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

None.

INDICATORS OF COMPLIANCE

A Test Report from a currently authorized release of the VSX4+XNFS Test Suite.

The test environment must consist of two systems communicating with each other using the defined protocol stacks, driving or being driven by the Portability Interface.

MIGRATION

There is no equivalent XPG3 Product Standard. The interfaces available to the client are those of the normal file system, except for minor differences due mainly to network error conditions, which are documented in the XNFS, Issue 4 Specification. Apart from these minor differences, there are no issues in migration of applications from a normal Base file system.

---

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