PORTABILITY GUIDE
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Preface

The X/OPEN Group, formed in late 1984, is an initiative taken by major European suppliers of computer systems.

The Group’s principal aim is to increase the volume of applications available on its members’ systems, and to maximise the return on investments in software development made by Users and Independent Software Vendors.

This is achieved by ensuring portability of application programs at the source code level. Through this portability, users can mix and match computer systems and applications software from many suppliers, and thus investment in applications software is protected into the future.

In order to provide such portability, the Group defines a Common Applications Environment based on the interfaces to the UNIX operating system, and covering other aspects required of a comprehensive applications interface. The Group has based its specification on the AT&T System V Interface Definition.

The X/OPEN Portability Guide provides a definition of the interfaces currently identified as components of the Common Applications Environment. More components will be defined in future editions as indicated in the future directions section.

This guide is aimed at both the decision makers and the implementation teams of:

- Independent Software Vendors
- Software Houses
- Users
- Equipment Manufacturers

The philosophy of the Common Applications Environment and an overview of its components is given in Part I. This is aimed at decision makers, but also serves as an introduction to the detailed definitions.

The Guide is designed to sit permanently on the desk, serving as a common reference point for anyone directly concerned with the practical side of software development, namely systems designers, programmers and consultants.
## Editorial Panel

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### Technical Consultants to X/OPEN

- Mike Banahan: The Instruction Set
- Eric Brunner: The Instruction Set
- Peter Griffiths: The Instruction Set
- Martijn de Lange: ACE Associated Computer Experts bv (consultant to Philips)
Acknowledgements

X/OPEN gratefully acknowledges:

- AT&T for permission to reproduce portions of its copyrighted System V Interface Definition (SVID) and material from the UNIX System V Release 2.0 documentation. In particular Mr. Doug Kevorkian of AT&T Bell Laboratories, Editor-in-Chief of the System V Interface Definition.

- The /usr/group Standards Committee, whose Standard contributed to the Group’s work, and Mr. Heinz Lycklama for his personal contribution.

- Relational Database Systems Inc. of Menlo Park, California (Telex no. 361834) for permission to use material from the specification of their C-ISAM product and for provision of that material in machine readable form.

- Micro Focus Ltd. of Newbury, Berkshire for permission to use material from the specification of their LEVEL II COBOL compiler and for provision of that material in machine readable form.
Structure of the Document

The X/OPEN Portability Guide is organised as follows:

PART 1  The Common Applications Environment. This part gives the overall philosophy of the Common Applications Environment. It identifies current interface definitions and includes statements of intent regarding further areas.

PART II  The X/OPEN System V Specification. This part contains the definition of the operating system interfaces.

PART III  The C Language. This part contains the definition of the C language and portability guidelines.

PART IV  The X/OPEN ISAM Definition. This part defines support for the indexed sequential file access method (ISAM).

PART V  The X/OPEN COBOL Definition. This part gives the X/OPEN definition for portable applications written in COBOL.

PART VI  Source Code Transfer. This part provides guidelines for transferring files of source code between different X/OPEN systems.
Referenced Documents

The following documents are referenced in this guide:

- System V Interface Definition (Spring 1985 - Issue 1)
- UNIX System V - Release 2.0 Programming Guide (April 1984 - Issue 2)
- 1984 /usr/group Standard
- ANSI Standard for COBOL (1974 - ANSI X3.23)
- ANSI Standard for FORTRAN (FORTRAN-77, 1978 - ANSI X3.9)
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