Preface

This manual describes the programmatic interfaces to transport services in the Solaris operating system.

In this guide the terms SunOS and Solaris are used interchangeably because the interfaces described in this manual are common to both. Solaris 2.5, SunSoft's™ distributed computing operating environment, is a superset of SunOS. It is comprised of SunOS release 5.5 with ONC+™, OpenWindows™, ToolTalk™, DeskSet™, OPEN LOOK®, and other utilities. This release of Solaris is fully compatible with System V, Release 4 (SVR4) and conforms to the third edition of the System V Interface Description (SVID). It supports all System V network services.

Who Should Use This Book

The guide assists you in developing a networked, distributed application in the Solaris operating system.

Use of this guide assumes basic competence in programming, a working familiarity with the C programming language, and a working familiarity with the UNIX® operating system. Previous experience in network programming is helpful, but is not required to use this manual.

How This Book Is Organized

Chapter 1, "Introduction to Network Programming Interfaces," gives a high-level introduction to networking concepts and the topics covered in this book.

Chapter 2, "Programming With Sockets," describes the socket interface at the transport layer.

Chapter 3, "Programming With the Transport Layer Interface (TLI)," describes the UNIX System V Transport Interface.

Chapter 4, "Transport Selection and Name-to-Address Mapping," describes the network selection mechanisms used by applications in selecting a network transport and its configuration.

Related Books

The following on-line System AnswerBook® products cover related network programming topics:

- *Solaris 2.5 Reference Manual AnswerBook*
- *Solaris 2.5 Software Developer AnswerBook*

The following third-party books are excellent sources on network programming topics:

- *UNIX Network Programming*, W. Richard Stevens, Prentice Hall Software Series, 1990.
- *System V Network Programming*, Stephen A. Rago, Addison-Wesley, 1993.
- *TCP/IP Illustrated, Volume I*, W. Richard Stevens, Addison-Wesley, 1994.
- *Networking Applications on UNIX System V Release 4*, Michael Padovano, Prentice Hall, Inc., 1993.
- *Internetworking with TCP/IP, Volume I: Principles, Protocols, and Architecture*, 2nd Edition, Douglas E. Comer and David L. Stevens, Prentice Hall, Inc., 1991.
- *Internetworking with TCP/IP, Volume II: Design, Implementation, and Internals*, Douglas E. Comer and David L. Stevens, Prentice Hall, Inc., 1991.
- *Internetworking with TCP/IP, Volume III: Client-Server Programming and Applications*, BSD Sockets Version, Douglas E. Comer and David L. Stevens, Prentice Hall, Inc., 1993.

- *Internetworking with TCP/IP, Volume III: Client-Server Programming and Applications*, AT&T TLI Version, Douglas E. Comer and David L. Stevens, Prentice Hall, Inc., 1994.

What Typographic Changes and Symbols Mean

The following table describes the typographic changes used in this book.

Table P-1 Typographic Conventions

Typeface or Symbol	Meaning	Example
`AaBbCc123`	The names of commands, files, and directories; on-screen computer output	Edit your `.login` file. Use `ls -a` to list all files. `machine_name% You have mail.`
`AaBbCc123`	What you type, contrasted with on-screen computer output	`machine_name%` **`su`** `Password:`
AaBbCc123	Command-line placeholder: replace with a real name or value	To delete a file, type `rm` *filename*.
AaBbCc123	Book titles, new words or terms, or words to be emphasized	Read Chapter 6 in *User's Guide*. These are called *class* options. You *must* be root to do this.

Shell Prompts in Command Examples

The following table shows the default system prompt and superuser prompt for the C shell, Bourne shell, and Korn shell.

Table P-2 Shell Prompts

Shell	**Prompt**
C shell prompt	`machine_name%`
C shell superuser prompt	`machine_name#`
Bourne shell and Korn shell prompt	`$`
Bourne shell and Korn shell superuser prompt	`#`