SCO® TCP/IP Development System for SCO® UNIX® Systems

Release and Installation Notes

SCO® TCP/IP Development System for SCO UNIX® Systems

Release and Installation Notes

© 1983-1993 The Santa Cruz Operation, Inc.
© 1980-1993 Microsoft Corporation.
© 1989-1993 UNIX System Laboratories, Inc.
All Rights Reserved.

No part of this publication may be reproduced, transmitted, stored in a retrieval system, nor translated into any human or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual, or otherwise, without the prior written permission of the copyright owner, The Santa Cruz Operation, Inc., 400 Encinal, Santa Cruz, California, 95060, U.S.A. Copyright infringement is a serious matter under the United States and foreign Copyright Laws.

The copyrighted software that accompanies this manual is licensed to the End User only for use in strict accordance with the End User License Agreement, which should be read carefully before commencing use of the software. Information in this document is subject to change without notice and does not represent a commitment on the part of The Santa Cruz Operation, Inc.

SCO UNIX Software is commercial computer software and, together with any related documentation, is subject to the restrictions on U.S. Government use as set forth below.

If this procurement is for a DOD agency, the following DFAR Restricted Rights Legend applies:

RESTRICTED RIGHTS LEGEND: Use, duplication or disclosure by the Government is subject to restrictions as set forth in subpararaph (c)(1)(ii) of rights in Technical Data and Computer Software Clause at DFARS 252.227-7013. Contractor/Manufacturer is The Santa Cruz Operation, Inc., 400 Encinal Street, Santa Cruz, CA 95060.

If this procurement is for a civilian government agency, the following FAR Restricted Rights Legend applies:

RESTRICTED RIGHTS LEGEND: This computer software is submitted with restricted rights under Government Contract No. _____ (and Subcontract No. _____, if appropriate). It may not be used, reproduced, or disclosed by the Government except as provided in Paragraph (g)(3)(i) of FAR Clause 52.227-14 or as otherwise expressly stated in the contract. Contractor/Manufacturer is The Santa Cruz Operation, Inc., 400 Encinal Street, Santa Cruz, CA 95060.

SCO, Open Desktop, The Santa Cruz Operation, the Open Desktop logo, and the SCO logo are registered trademarks of The Santa Cruz Operation, Inc. in the USA and other countries.

All other brand and product names are or may be trademarks of, and are used to identify products or services of, their respective owners.

SCO TCP/IP is derived from Lachman Technology, Inc. (LTI)
SYSTEM V STREAMS TCP/IP, a joint development of LTI and Convergent Technologies.

Date: 16th April 1993
Document Version: 1.2.1B

Introduction 1

Chapter 1
Contents of this package 3

Chapter 2
System requirements 5

Chapter 3
Installing the SCO TCP/IP Development System 7

Chapter 4
Removing the SCO TCP/IP Development System 9

Chapter 5
Known inconveniences with this release 11

Chapter 6
Documentation errata 13

Introduction

The SCO® TCP/IP for UNIX® System V/386 Release 1.2.1 Development System is an implementation of TCP/IP and related protocols for SCO UNIX Release 3.2 and later. The product, although based on the latest functional and performance improvements of 4.3BSD, has been adapted to run within the STREAMS framework and TLI specification of SCO UNIX.

This release of the SCO TCP/IP Development System is intended for the SCO UNIX Release 3.2 Version 4 Development System only and not for previous releases of the SCO UNIX or SCO XENIX® System V development systems.

NOTE Please read through this document before installing the SCO TCP/IP software.

The SCO TCP/IP Development System Version 1.2 includes new header files and new library routines that make use of system calls provided in the current TCP/IP Runtime System. For this reason, the SCO TCP/IP Development System Release 1.2.1 cannot be used without SCO TCP/IP Runtime System Release 1.2.1. In addition, applications built using the SCO TCP/IP Development System Version 1.2 may not run on the SCO TCP/IP Runtime System Version 1.1.3 or earlier.

SCO TCP/IP Release 1.2.1 allows networking applications to open up to the kernel defined limit of **NOFILES** (maximum limit of 11,000 file descriptors at one time (previous limit: 150)). New applications can open more than 150 file descriptors per user, if necessary.

There is no need to rewrite existing applications in order for them to be compatible with the TCP/IP Release 1.2.1, although you need to relink applications with the libraries in Release 1.2.1 in order to take advantage of this feature.

Conventions used in these notes

Utilities and commands are printed in **boldface** type, with the Reference Guide section in which they appear following in parentheses, for example: **cat**(C). Filenames are *italicized*, for example; */etc/passwd*. Output is printed in monospaced font, for example: `Error: incorrect volume in drive`. Text which you must key in at the terminal appears in boldface type, for example: **exit**.

RFCs are referred to throughout the TCP/IP documentation. RFCs are Requests for Comments, which are an informal, loosely coordinated set of notes on TCP/IP and the connected Internet, including its architecture, protocols and history. RFCs are available electronically from the Internet Network Information Center. The Internet domain name for the host that provides the archive is NIC.DDN.MIL.

Chapter 1

Contents of this package

The following software and documentation are included with this release:

- one SCO TCP/IP Development System diskette
- these *Release and Installation Notes*
- the *SCO TCP/IP Programmer's Guide and Programmer's Reference*

Chapter 2

System requirements

The following chart details the resources needed to run the SCO TCP/IP Development System:

Computer	industry standard (AT), Microchannel, or EISA computers with 80386 and 80486 memory chips
Disk capacity	at least 350 Kbytes of hard disk storage is needed for the SCO TCP/IP Development System
RAM	a minimum of 2 Mbytes of RAM for the SCO TCP/IP Development System
Operating system	SCO UNIX Release 3.2 Version 4 with SCO UNIX Development System, Release 3.2 Version 4, and the SCO Maintenance Supplement Release 4.1 for SCO UNIX
Software	SCO TCP/IP Release 1.2.1 Runtime System

Programs which use the SCO TCP/IP Development System must be compiled with the following options to the C compiler: **-DLAI_TCP** and **-Di386**. These options must be used whenever the source modules use any of the include files related to SCO TCP/IP Development System.

Chapter 3

Installing the SCO TCP/IP Development System

Installation is done through the **custom** utility. Follow the steps in this section to install the SCO TCP/IP Development System.

NOTE The following packages must be installed before the SCO TCP/IP Development System can be installed:

- SCO UNIX Runtime System Link Kit package
- SCO UNIX Development System
- SCO TCP/IP Runtime System

To install the SCO TCP/IP Development System, follow these steps:

1. Bring the system to system maintenance mode by entering **init 1** from the command line on the first console multiscreen, *tty01*. After several shutdown messages, the following prompt appears:

```
Type CONTROL-d to proceed with normal startup,
(or give root password for system maintenance).
```

   Enter the *root* password.

2. Type **custom** and press ⟨Return⟩.
3. The initial **custom** menu appears. Select Install.
4. You are prompted to select a product to install. Choose A New Product and press ⟨Return⟩.

5. The Install menu appears. Select Entire Product to install all of the packages, or select Packages to install a subset of the product. Unless you are updating individual packages or have space constraints on your hard disk, select Entire Product.
6. You are prompted to insert distribution volume 1. Insert the floppy into drive 0 and press ⟨Return⟩ to continue. The following messages appear:

```
Installing custom data files...
Preparing file lists...
```

7. If you selected Packages, a display of package names appears. Select the desired packages by moving the cursor to each package, then pressing the space bar. When all desired packages are marked, press ⟨Return⟩. The disks you are prompted to insert depend on the packages you chose.
8. You are prompted to insert TCP/IP volume 1. Because it is already in the floppy disk drive, simply press ⟨Return⟩ to continue. The following message appears:

```
Extracting files...
```

   It takes several minutes for the files to be extracted from volume 1.
9. After a few moments, the restricted rights legend appears, and the following message prompts you for your serial number:

```
Enter your serial number or enter q to quit:
```

   Enter the serial number as it appears on your TCP/IP serial number and activation key card and press ⟨Return⟩.
10. Press any key to return to the **custom** Install menu. Select **quit** and press ⟨Return⟩. Select **yes** and press ⟨Return⟩ to exit. The TCP/IP Development System is now installed on your system.

Chapter 4

Removing the SCO TCP/IP Development System

Follow these steps to remove the SCO TCP/IP Development System:

1. Log in to the system as *root*.
2. Enter **custom** at the prompt.
3. The initial Custom menu appears, along with the message "Select a set to customize". Select the entry for SCO TCP/IP and press ⟨Return⟩.
4. The next menu appears. Select "Remove one or more packages".
5. A display of package names for SCO TCP/IP appears. Type your selection and press ⟨Return⟩.
6. After a pause (during removal), you return to the package menu. Type **q** to quit.

Chapter 5

Known inconveniences with this release

This section contains information on software and hardware limitations, unsupported features, and workarounds that you may need when you install and use the SCO TCP/IP Development System.

- Due to the interaction between STREAMS, VP/ix, and the kernel, network performance will be impaired when running VP/ix.
- Under the Open Desktop Development System Release 2.0 the TCP socket driver, **adjtime** incorrectly calculates the time adjustment to be made if given an argument greater that 20 seconds.
- This release of the SCO TCP/IP Development System does not provide an Object Module Format (OMF) socket library for cross development of programs whose target platform is SCO XENIX.
- During the removal of the TCP/IP Development System you may see the following error message:

  ```
  mv: cannot access /usr/lib/tcpdev/save/usr/include/sys/wait.h
  ```

  Please ignore this message.

Chapter 6

Documentation errata

The following reference is incorrect in the SCO TCP/IP Development System documentation set.

- On page 6 of the *TCP/IP Programmer's Guide*, you are directed to the *STREAMS Network Programmer's Guide* for further information on the Transport Layer Interface (TLI). Instead, consult the "Transport Layer Interface" chapter of the *Developer's Topics* guide in your SCO UNIX Development System documentation set.

Please help us to write computer manuals that meet your needs by completing this form. Please post the completed form to the Publications Manager nearest you: The Santa Cruz Operation, Ltd., Croxley Centre, Hatters Lane, Watford WD1 8YN, United Kingdom; The Santa Cruz Operation, Inc., 400 Encinal Street, P.O. Box 1900, Santa Cruz, California 95061, USA or SCO Canada, Inc., 130 Bloor Street West, 10th Floor, Toronto, Ontario, Canada M5S 1N5.

Volume title: _____
(Copy this from the title page of the manual)

Product: _____
(for example, SCO UNIX System V Release 3.2 Operating System Version 4.0)

How long have you used this product?

❑ Less than one month ❑ Less than six months ❑ Less than one year

❑ 1 to 2 years ❑ More than 2 years

How much have you read of this manual?

❑ Entire manual ❑ Specific chapters ❑ Used only for reference

	Agree				*Disagree*
The software was fully and accurately described	❑	❑	❑	❑	❑
The manual was well organized	❑	❑	❑	❑	❑
The writing was at an appropriate technical level (neither too complicated nor too simple)	❑	❑	❑	❑	❑
It was easy to find the information I was looking for	❑	❑	❑	❑	❑
Examples were clear and easy to follow	❑	❑	❑	❑	❑
Illustrations added to my understanding of the software	❑	❑	❑	❑	❑
I liked the page design of the manual	❑	❑	❑	❑	❑

If you have specific comments or if you have found specific inaccuracies, please report these on the back of this form or on a separate sheet of paper. In the case of inaccuracies, please list the relevant page number.

May we contact you further about how to improve SCO documentation? If so, please supply the following details:

Name _____ *Position* _____

Company _____

Address _____

City & Post/Zip Code _____

Country _____

Telephone _____ *Facsimile* _____

16 April 1993

BH02700P001

65275

AJ02701P001