

Installation Notes

SPP-UX_libc_Patch 5.2.128

libc/pthreads Version 5.2.0.1

Part Number: B5655-90040

This tape contains a patch to libpthread.1 that permits executables that have been linked on SPP-UX 5.1 to run on SPP-UX 5.2.

To install the patch follow the instructions in Chapter 5 of the *SPP-UX Distribution Notice* to prepare the system for updating products from a tape. Then type the command:

```
/usr/sbin/swinstall -x rpc_timeout=9 -x reinstall=true  
-x allow_downdate=true -x allow_multiple_versions=true  
-x mount_all_filesystems=false -s /dev/rmt/0m  
SPP-UX_libc
```

Hewlett-Packard SPP-UX V5.2

Release Notice

Contents

Overview	1
Requirements	1
Product documentation	2
Licensing	2
New features	2
Known problems	3
Directories and files	4
Getting assistance	5

Hewlett-Packard SPP-UX V5.2 Release Notice

Publication Date: 6/5/97

Copyright Copyright Hewlett-Packard Company 1997. All Rights Reserved. Reproduction, adaptation, or translation without prior written permission is prohibited, except as allowed under the copyright laws.

Notice The information contained in this document is subject to change without notice.

Hewlett-Packard makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Hewlett-Packard shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this material.

Printed in the United States of America. This document is copyright © by Convex Computer Corporation, 3000 Waterview Parkway, P.O. Box 833851, Richardson, TX 75083-3851. This document may, however, be copied, duplicated, reproduced, translated, stored electronically, or reduced to machine-readable form without prior written consent from Convex Computer Corporation.

Overview

This release notice describes the V5.2 release of Hewlett-Packard SPP-UX. Please refer to this document before reporting problems; your questions may be answered here.

Requirements

This section describes hardware and software requirements for the V5.2 release of Hewlett-Packard SPP-UX.

Hardware requirements

The V5.2 release of SPP-UX supports the Exemplar SPP-1200, SPP-1600, and Exemplar S-Class SPP-2000 systems.

Note

SPP-UX V5.2 does not support Exemplar X-Class SPP-2000 platforms.

Software corequisites

The V5.2 release of SPP-UX has the following software corequisites:

- For Hewlett Packard Exemplar S-Class SPP-2000 servers
 - OpenBoot firmware must be at version V3.1 or later.
 - Test station diagnostic and EST software, where installed must be at Version 3.1.
- For Hewlett Packard Exemplar non-2000 (1200/1600) servers
 - OpenBoot firmware must be at version V2.0.3 or later.
 - Test station diagnostic and EST software, where installed must be at Version 8.0.
- All layered products, including compilers and tools, must be those that accompany the SPP-UX V5.2 distribution
- The first two corequisites must be installed on your Exemplar test station and the third on your SPP immediately after you install the Exemplar software upgrade.

Configuration restrictions

The following configuration restrictions must be met on your Exemplar system in order to run SPP-UX V5.2:

- Each Exemplar S-Class hypernode must have between 256MB and 4GB of physical memory.
- Node 0 must have a vnode pager for the entire system; this means that the file `/paging/space` must reside on node 0, and must be called by the `swapon` command in the `/etc/rc` file, or in one of the files executed by `/etc/rc`
- A default pager partition must remain active on each hypernode at all times
- The root filesystem must not be a large filesystem

Upgrade prerequisites

Exemplar 1200/1600 systems must be running SPP-UX 4.2 or greater. The associated test stations must be running HP-UX 9.05. Please refer to the *Exemplar Software Distribution Notice* for upgrade instructions.

Exemplar S-Class systems have no upgrade prerequisite.

Product documentation

SPP-UX V5.2 is documented in:

- *Exemplar Site Preparation Guide: S-Class Server, 1st Edition* A4716-90005
- *Exemplar Software Distribution Notice, V5.2* B5655-90035
- *SPP-UX System Administration Guide, 4th Edition* B5655-90002
- *Exemplar Architecture: S-Class and X-Class Servers, 1st Edition* A4716-90001

Licensing

The SPP-UX V5.2 release is subject to license limit enforcement. Correct operation of your Exemplar system requires a license key for each software product. If users do not acquire a license, they are instructed to contact the system administrator at your site for assistance.

Hewlett-Packard/Convex products are licensed using the FlexLM licensing system. Refer to the *Exemplar Software Distribution Notice* that accompanies this release and the *FLEXlm End User Manual* for licensing information.

New features

The following features are new in the SPP-UX V5.2 release:

HP-UX V10.01 compatibility

The SPP-UX V5.2 release supports applications requiring HP-UX V10.0. Specifically, the following system calls have been added to SPP-UX:

- **adjtime** synchronize system clock
- **getsid** get the session id of the process
- **lchown** change the owner of a symbolic link itself
- **sigsend** send a signal to a process or process group
- **sigsendset** alternative to **sigsend**
- **statvfs** similar to **statfs**
- **fstatvfs** similar to **fstatfs**
- **tcgetsid** get the session id of a terminal

Virtual Memory Accounting

The SPP-UX V5.2 release generates accounting data compatible with HP-UX V10.01 accounting scripts and tools. However, this information is not gathered in the same manner. SPP-UX V5.2 bills for Kilobyte-seconds of virtual memory used. HP-UX V10.01 bills for Kilobyte-seconds physical memory used. The data generated by this will allow similar billing practices to be used between systems.

Realtime Subcomplex

SPP-UX V5.2 realtime functionality will now be available if properly licensed. To enable this functionality you must purchase the proper license keys. Contact the Hewlett-Packard/CXD Technical Assistance Center (TAC).

Datamover Hardware support

The *SPP-UX* V5.2 release now enables access to the datamover hardware. The datamover hardware is only available on Exemplar S and X class systems. You must have EPAC revision 2 or greater hardware to take advantage of this feature. To take advantage of the increased performance of the datamover hardware you must explicitly call *ail_bcopy()*, and associated routines which are available in the ail library. See the *data_mover(3x)* manual page for details.

Automated backup support

The *SPP-UX* V5.2 release supports unattended filesystem backup via **dump**, **restore**, **fbackup**, and **frecover** in conjunction with DLT-4700 with stacker.

SPP-2000 checkpoint/restart support

The *SPP-UX* V5.2 release supports checkpointing jobs on the Exemplar S-Class. However, migration of checkpointed jobs from SPP-1x00 to the S-Class is not supported.

I/O Devices

The *SPP-UX* V5.2 release supports the following I/O devices:

- * DDS-2 DAT
- * DDS-3 DAT
- * 4 GB Legacy disks
- * 4 GB Low Profile disk
- * 8 GB Fast 20 disks
- * 9 GB Legacy disks
- * DLT 4700
- * PCI Fast 20 SCSI
- * PCI FDDI
- * PCI HIPPI
- * PCI 10/100 T Ethernet
- * Timberline 9490 tape drives
- * 3490/3490e tape drives

Known problems

This section describes problems in *SPP-UX* V5.2 that are known at this time. Workarounds for these problems are described.

network performance tunable

Problem

You may experience a performance degradation if you have multiple network interfaces on a node and do not set the tunable "HSnet, node complex data requirement" to the proper value.

Workaround

To obtain the same performance behavior as SPP-UX 5.1, set the tunable "HSnet, node complex data requirement" to 16 on each node. For more information on this tunable see you "Exemplar Networking Guide".

remsh may hang

Problem

The remsh command may hang when connecting to an SPP-1200 or SPP-1600 system.

Workaround

Retry the operation.

HP Security Bulletin #42

Problem

/usr/sbin/fpkg2swpkg allows unauthorized root access on all 10.XX releases of HP-UX.

Workaround

Remove the suid bit of **/usr/sbin/fpkg2swpkg**

```
chmod -s /usr/sbin/fpkg2swpkg
```

HP Security Bulletin #49

Problem

Vulnerability in the **chfn** command.

Workaround

Install PHCO_9595 for SPP-UX V3.X/4.X or PHCO_9596 for SPP-UX V5.2

HP Security Bulletin #50

Problem

Vulnerability in the **chsh** command.

Workaround

Install PHCO_9600 for SPP-UX V3.X/4.X or PHCO_9601 for SPP-UX V5.2.

Directories and files

The entire utilities filesystem layout has been changed to follow the SYSV R4 and OSF/1 paradigms. The largest impact is on embedded pathnames and symbolic links have been created to ease the transition. Major path changes include:

- **/bin** moved to **/usr/bin**.
- **/lib** moved to **/usr/lib**.
- **/etc** no longer contains executable programs or scripts.
- The operating system is now loaded from **/stand** instead of **/os**.
- Startup **rc** scripts have changed dramatically.

Large Files

The filesystem utilities listed below have been modified to run on Exemplar systems and to work on files large than 2 gigabytes in size. These utilities should be accessed by invoking them with full path names to gain access to Exemplar specific argument flags. See their respective man pages for details.

- /usr/sbin/dump
- /usr/sbin/restore
- /sbin/fs/hfs/mkfs
- /sbin/fs/hfs/cnx_mkfs
- /sbin/fs/hfs/newfs
- /sbin/fs/hfs/cnx_mkfs

Getting assistance

If you have questions about SPP-UX V5.2, contact the Hewlett-Packard/CXD Technical Assistance Center (TAC). To contact the TAC, use one of the following phone numbers:

- Within the continental U.S., call 1(800)952-0379.
- From Canada, call 1 (800) 345-2384
- All other locations, contact the nearest Hewlett-Packard office.

The TAC recommends using the `contact` utility to report a hardware, software, or documentation problem. Refer to the `contact(1)` man page for complete details.

