

Tru64 UNIX 5.0A and TruCluster 5.0A

Patch Summary and Release Notes for Patch Kit-0001

July 2000

This manual describes the release notes and contents of Patch Kit-0001. It provides any special instructions for installing individual patches.

For information about installing or removing patches, baselining, and general patch management, see the document called *Patch Kit Installation Instructions*.

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About This Manual

This manual contains information specific to Patch Kit-0001 for the Tru64™ UNIX 5.0A operating system and TruCluster™ 5.0A software products. It provides a list of the patches contained in each kit and describes any information you need to know when installing specific patches.

For information about installing or removing patches, baselining, and general patch management, see the *Patch Kit Installation Instructions*.

Audience

This manual is for the person who installs and removes the patch kit and for anyone who manages patches after they are installed.

Organization

This manual is organized as follows:

Chapter 1 Contains the release notes for this patch kit.

Chapter 2 Summarizes the Tru64 UNIX operating system patches included in the kit.

Chapter 3 Summarizes the TruCluster software patches included in the kit.

Related Documentation

In addition to this manual, you should be familiar with the concepts and mechanisms described in the following Tru64 UNIX and TruCluster documents:

- Tru64 UNIX and TruCluster *Patch Kit Installation Instructions*
- Tru64 UNIX *Installation Guide*
- Tru64 UNIX *System Administration*
- TruCluster Server *Software Installation*
- TruCluster Server *Administration*
- Any release-specific installation documentation

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- If known, the type of processor that is running the Tru64 UNIX software.

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Release Notes

This chapter provides information that you must be aware of when working with Tru64 UNIX 5.0A and TruCluster 5.0A Patch Kit-0001.

1.1 Required Storage Space

The following storage space is required to successfully install this patch kit:

Base Operating System

- Temporary Storage Space

A total of ~250 MB of storage space is required to untar this patch kit. We recommend that this kit not be placed in the `/`, `/usr`, or `/var` file systems because doing so may unduly constrain the available storage space for the patching activity.

- Permanent Storage Space

Up to ~25 MB of storage space in `/var/adm/patch/backup` may be required for archived original files if you choose to install and revert all patches. See the *Patch Kit Installation Instructions* for more information.

Up to ~25.5 MB of storage space in `/var/adm/patch` may be required for original files if you choose to install and revert all patches. See the *Patch Kit Installation Instructions* for more information.

Up to ~174 KB of storage space is required in `/var/adm/patch/doc` for patch abstract and README documentation.

A total of ~136 KB of storage space is needed in `/usr/sbin/dupatch` for the patch management utility.

TruCluster Server

- Temporary Storage Space

A total of ~250 MB of storage space is required to untar this patch kit. We recommend that this kit not be placed in the `/`, `/usr`, or `/var` file systems because doing so may unduly constrain the available storage space for the patching activity.

- Permanent Storage Space

Up to ~25 MB of storage space in `/var/adm/patch/backup` may be required for archived original files if you choose to install and revert all patches. See the *Patch Kit Installation Instructions* for more information.

Up to ~26 MB of storage space in `/var/adm/patch` may be required for original files if you choose to install and revert all patches. See the *Patch Kit Installation Instructions* for more information.

Up to ~174 KB of storage space is required in `/var/adm/patch/doc` for patch abstract and README documentation.

A total of ~136 KB of storage space is needed in `/usr/sbin/dupatch` for the patch management utility.

1.2 New dupatch Features

Beginning with Revision 26-02 of `dupatch`, this patch tool utility has been enhanced to provide new features, as described in the following sections. For more information, see the *Patch Kit Installation Instructions*.

1.2.1 Patch Installation from Multiuser Mode

You can now install patches when a system is in multiuser mode.

There are no restrictions on performing patch selection and preinstallation checking in multiuser mode.

Although you can now install patches in multiuser mode, Compaq recommends that you bring down your system to single-user mode when you install patches that affect the operation of the Tru64 UNIX operating system (or the product you are patching). If your system must remain in multiuser mode, we recommend that you apply the patches when the system is as lightly loaded as possible.

1.2.2 Automatic Kernel Build

If the patches that are installed indicate that a kernel build is required, `dupatch` will initiate the kernel build automatically.

Most times a reboot is required to complete the installation and bring the system to a consistent running environment. Certain file types, such as libraries, are not moved into place until you reboot the system.

When installing patches in multiuser mode, you can take one of three options after the kernel build is complete:

- Reboot the system immediately.
- Reboot the system at a specified time.
- Forego a system reboot.

1.2.3 Patch Installation from a Pseudo-Terminal

You can now install patches on the system from a pseudo-terminal (pty) while in single-user mode. To do this, log in to the system as root from a remote location and specify that the patches are to be installed in single-user mode. After all the patch prerequisites are completed, the system goes into single-user mode while it maintains the network connection for the root user. The system then installs the patches.

1.3 Release Note for TruCluster Server

If you are installing only TCR patches, you **MUST** rebuild the kernel and reboot the machine for the changes to take effect. If removing only TCR patches, you **MUST** also rebuild the kernel and reboot the machine for the changes to take effect.

1.4 Release Notes for Patch 75.00

SysMan Station does not dynamically update changes to a device name. If you use `dsfmgr(8)` to change the `base_name` of a device while `smsd(8)` is running, any SysMan Station clients that connect to the running `smsd(8)` will reflect the old `base_name` in their views.

To obtain a correct view, restart the SysMan Station daemon `smsd(8)` by performing the following steps. If you are on a cluster, perform these steps on all affected cluster members.

1. Close all open SysMan Station client sessions.
2. Enter the following command:

```
# /sbin/init.d/smsd restart
```

1.5 Release Note for TCR Patch 13.00

This patch fixes a problem seen when running `clu_upgrade preinstall` commands on certain multi-cpu systems. Numerous error messages similar to the following are seen:

```
*** Error ***
```

```
Could not create:  ocolsocols/.Old..ocols
```

If you see this problem, enter `^C` and rerun the `clu_upgrade preinstall` command.

Summary of Base Operating System Patches

This chapter summarizes the base operating system patches included in Patch Kit-0001.

Table 2–1 lists patches that have been updated.

Table 2–2 provides a summary of patches.

Table 2–1: Updated Base Operating System Patches

Patch IDs	Change Summary
Patches 1.00, 2.00, 3.00, 7.00, 8.00, 9.00, 10.00, 11.00, 12.00, 14.00, 15.00, 19.00, 22.00, 23.00, 25.00, 27.00, 30.00, 31.00, 32.00, 33.0., 35.00, 36.00, 37.00, 38.00, 41.00, 42.00, 47.00, 50.00, 51.00, 53.00, 54.00, 57.00, 59.00, 61.00, 62.00, 64.00, 65.00, 66.00, 67.00, 68.00, 69.00, 70.00, 71.00, 72.00, 73.00, 74.00, 75.00, 76.00, 77.00, 78.00, 79.00, 80.00, 81.00, 82.00, 83.00, 84.00, 85.00, 86.00, 87.00, 89.00, 90.00, 91.00, 95.00, 96.00, 97.00, 98.00, 99.00, 100.00, 101.00	New
Patches 4.00, 5.00, 6.00	Superseded by Patch 7.00
Patch 20.00	Superseded by Patch 25.00
Patch 34.00	Superseded by Patch 67.00
Patch 48.00	Superseded by Patch 77.00
Patch 21.00	Superseded by Patch 79.00
Patches 44.00, 45.00, 46.00	Superseded by Patch 82.00
Patches 13.00, 24.00, 39.00, 40.00, 92.00, 52.00	Superseded by Patch 87.00
Patches 28.00, 9.00, 43.00, 49.00, 55.00, 56.00, 58.00, 16.00, 17.00, 18.00, 93.00, 88.00, 94.00	Superseded by Patch 96.00
Patch 26.00	Superseded by Patch 101.00

Table 2–2: Summary of Base Operating System Patches

Patch IDs	Abstract
Patch 1.00 OSF505CDE-001	<p>Patch: CDE does not recreate list of application groups</p> <p>State: New</p> <p>This patch fixes a problem where the Common Desktop Environment (CDE) Application Manager did not recreate the list of application groups at login. After customizing the application groups, users would see the old groups instead of the new groups.</p>
Patch 2.00 OSF505DX-002	<p>Patch: Compaq SNMP subagent core dumps</p> <p>State: New</p> <p>This patch fixes a problem that causes Compaq SNMP subagent (cpq_mibs) to coredump at boot-up time or when being reinvoked, which results in invalid display of information on Insight Manager web pages.</p>

Table 2–2: Summary of Base Operating System Patches (cont.)

Patch 3.00 OSF505DX-003	Patch: Fixes automount problem State: Existing This patch fixes a problem that occurs when restarting all NFS daemons with automount argument set to empty.
Patch 7.00 OSF505DX-007	Patch: Fixes problems with dxaccounts application State: New. Supersedes patches OSF505DX-004 (4.00), OSF505DX-005 (5.00), OSF505DX-006 (6.00) This patch corrects the following problems: <ul style="list-style-type: none">• Fixes a situation in which a system running ASU experiences dxaccounts crash problem when a user is deleted from PC User view.• Fixes the following cli command problems:<ul style="list-style-type: none">– Incorrect results of usermod -G command.– Not setting c2 security attributes values when useradd/usermod commands with -x account_inactive account_expiration are executed.– When running useradd X and useradd Y on the same machine but from separate terminals, two different types of contention error messages are displayed.– The following command does not display an error message, which it should when executed from a NIS client: <pre>usermod (or useradd) -x local=0' groupmod (or groupadd) -x local=0</pre>• Fixes the following dxaccount problems:<ul style="list-style-type: none">– The ability to change root's login/uid through cli/dxaccounts utilities.– The -t flag in useradd and usermod commands' usage displays an error message instead of adding or modifying the local user.– dxaccounts dialog messages are incorrectly displayed when a user is added with no password entry.– Unable to create a new user from the PC Users' view on a system with ASU installed.– The following problems can occur with the dxaccounts application on ASU system:<ul style="list-style-type: none"><input type="checkbox"/> The dxaccounts crashes when the root icon is double clicked.<input type="checkbox"/> The full name of a new PC account is not mapped to a UNIX user.<input type="checkbox"/> Erasing a PC account's fields does not work: the values erased remains.<input type="checkbox"/> The default values of Home Directory, Login Script & User Profile Path for a PC user are invalid.
Patch 8.00 OSF505X11-001	Patch: Provides missing compose definitions for ISO8859-15 State: New This patch provides missing compose definitions in ISO8859-15-based locales for scaron, Scaron, zcaron, and Zcaron characters.
Patch 9.00 OSF505X11-002	Patch: Fix for problem with Caps Lock setting State: New This patch fixes a problem in which some 8-bit characters cannot be entered directly from the keyboard when the Caps Lock setting is on.

Table 2–2: Summary of Base Operating System Patches (cont.)

Patch 10.00 OSF505X11-003A	Patch: Fixes a problem with the svn widget of libDXm.so State: New This patch fixes a problem in which the svn widget of libDXm.so creates identical backgrounds and foregrounds.
Patch 11.00 OSF505X11-004	Patch: Fix for lbxproxy utility State: New This patch fixes a problem where the X windows lbxproxy utility that is used to make Low Bandwidth X (LBX) connections to an X server did not accept local connections.
Patch 12.00 OSF505X11-005	Patch: Drawing problems with PowerStorm 4D10T graphics card State: Existing This patch corrects the following problems: <ul style="list-style-type: none">• Fixes a problem where, on systems with a PowerStorm 4D10T (ELSA Gloria Synergy, SN-PBXGK-BB) graphics card or a PCI To Ethernet/Graphics Combo Adapter (3X-DEPVD-AA), sometimes lines and images are not drawn correctly in scrolled windows.• Fixes synchronization and drawing problems in the X server for the PowerStorm 4D10T (ELSA GLoria Synergy, SN-PBXGK-BB) graphics card.
Patch 14.00 OSF505-005	Patch: Updates the Danish (da_DK.ISO8859-1) locale State: New This patch updates the Danish (da_DK.ISO8859-1) locale to use all lowercase month names.
Patch 15.00 OSF505-006	Patch: Fixes a problem that occurs in multibyte locales State: New This patch fixes a problem that sometimes occurs when sorting large data files in a multibyte locales like Japanese.
Patch 19.00 OSF505-010	Patch: Fixes a problem with the grep command State: New This patch fixes a problem with the grep command in which the options -p -v together do not produce any output.
Patch 22.00 OSF505-013A	Patch: Fix for EVM problems on some Alpha EV6 systems State: New This patch fixes the following EVM problems on some Alpha™™ EV6 systems: <ul style="list-style-type: none">• evmshow and the event viewer will display timestamps that are incorrect by one hour for binlog events when Daylight Savings Time is in effect.• When a binlog event is being displayed on a system located in a different timezone from the system that originally posted the event, the time may be displayed as local time for the posting system. This is inconsistent with the way time is displayed by other utilities, including DECEvent and Compaq Analyze.
Patch 23.00 OSF505-014	Patch: Fixes a kernel memory fault when using ATM State: New This patch fixes a kernel memory fault when using ATM.
Patch 25.00 OSF505-016	Patch: Fix for VMAC functionality when used with NETrain State: New. Supersedes patch OSF505-011 (20.00) This patch corrects the following: <ul style="list-style-type: none">• Fixes a kernel memory fault in VMAC code if_addnewaddr().• Adds a fix to VMAC functionality when used with NetRAIN.

Table 2–2: Summary of Base Operating System Patches (cont.)

Patch 27.00 OSF505-018	Patch: Changes quotactl prototype to meet POSIX standards State: New This patch changes the quotactl prototype in /usr/include/ufs/quota.h to meet POSIX standards.
Patch 30.00 OSF505-021	Patch: Fixes problems in the Compaq C compiler State: New This patch fixes the following problems in the Compaq C compiler: <ul style="list-style-type: none">• A virtual memory exhausted error when compiling the Open Source encryption library OpenSSL.• An optimizer problem in loop unrolling that caused an incorrect result under certain conditions.• An optimizer problem in loop unrolling that caused an incorrect result under certain conditions.
Patch 31.00 OSF505-022	Patch: Fix for nfscast error message State: New This patch prevents the message "nfscast: select: Invalid argument" message from appearing in the daemon.log when the server is not available. It also changes the "trymany: servers not responding: RPC: Unable to receive " message to an informational message rather than an error message.
Patch 32.00 OSF505-023	Patch: Kernel panics Classical IP over lfa ATM driver State: New This patch fixes a kernel panic seen when running Classical IP over the lfa ATM driver. This panic would only occur in lockmode 4. If not in lockmode 4, the symptom would be a CPU hang.
Patch 33.00 OSF505-024	Patch: System panics when running ATM State: New This patch fixes a problem in which the system may panic with the error message "simple lock: time limit exceeded" when running ATM.
Patch 35.00 OSF505-026	Patch: Fixes a problem with the find command State: New This patch fixes a problem with the find command. find fails to show filenames that start with a period.
Patch 36.00 OSF505-027	Patch: OS only looks in slot 0 for primary CPU State: New This patch fixes a problem where the operating system only looks in slot 0 for the primary CPU.
Patch 37.00 OSF505-028	Patch: Fixes a tftpd problem State: New This patch fixes a tftpd problem when responding to a broadcast read request and it adds the -b option to control whether to respond to any broadcasts.
Patch 38.00 OSF505-029	Patch: Fixes linker (ld) problems State: New This patch corrects two linker (ld) problems: <ul style="list-style-type: none">• Linking large applications with -om -call_shared with very large numbers of external symbols sometimes failed to link.• Linking large applications with -om -call_shared with very large numbers of local symbols sometimes failed to link.

Table 2–2: Summary of Base Operating System Patches (cont.)

Patch 41.00 OSF505-032	Patch: Corrects problem with the fgrep command State: New This patch corrects a problem with the fgrep command. When fgrep is used with the -s flag, all output is suppressed.
Patch 42.00 OSF505-033	Patch: Fixes problem with the restore command State: New This patch fixes a problem in which the restore command can fail with the following error: Cannot malloc space for property list
Patch 47.00 OSF505-038	Patch: UFS disk quotas are not updating automatically State: New This patch fixes a problem where UFS disk quotas are not updating automatically.
Patch 50.00 OSF505-042	Patch: crontab jobs run multiple times in same minute State: New This patch fixes a problem where some crontab jobs run multiple times in the same minute.
Patch 51.00 OSF505-043	Patch: Provides the latest driver for PowerStorm 4D10T State: New This patch provides the latest driver for the PowerStorm 4D10T (ELSA Gloria Synergy, SN-PBXGK-BB) graphics card and the latest graphics driver for the PCI To Ethernet/Graphics Combo Adapter (3X-DEPVD-AA).
Patch 53.00 OSF505-045	Patch: Fixes errors seen when compiling with the -om switch State: New This patch fixes three errors that are occasionally seen when compiling with the -om switch: om: fast access range error om: value(0x1201704de) not in range of GP table om: value(0x1201704de) not in range of GP table
Patch 57.00 OSF505-049	Patch: Fixes "lock_terminate: lock held" panic State: New This patch fixes a "lock_terminate: lock held" panic when deleting a process group.
Patch 59.00 OSF505-053	Patch: Updates emx Fiber Channel driver to revision 1.22 State: New This patch updates the emx Fiber Channel driver to revision 1.22, which corrects a Data Error that is seen when running with the latest Emulex firmware. This error corrupts data when reading from the disk. This revision also fixes an error that causes performance degradation.
Patch 61.00 OSF505-055	Patch: Hardware manager inaccurately reports CPU speed State: New This patch fixes a problem where the hardware manager inaccurately reports a CPU speed that was one MHz less than the correct speed.
Patch 62.00 OSF505-056	Patch: Cursor displays incorrectly when image plane set to 1 State: New This patch fixes a problem where the cursor is displayed incorrectly when the image plane is set to 1 and the mask plane is set to 0.

Table 2–2: Summary of Base Operating System Patches (cont.)

Patch 64.00 OSF505-058	Patch: Fixes btcreate and btextract problems State: New This patch fixes the following btcreate and btextract problems: <ul style="list-style-type: none">• The DEFAULT restore fails if disklabel is different.• btcreate does not wait long enough between vdumps for the next tape to be loaded by some media changers.
Patch 65.00 OSF505-059	Patch: Fixes a hang in the shutdown process State: New This patch fixes a hang in the shutdown process (shutdown now) of a system when a device has flow control switched off.
Patch 66.00 OSF505-060	Patch: Problems with kdbx extensions mount and swap State: New This patch fixes problems with the kdbx extensions mount and swap. Information about the file system type is incorrect in the mount command. The device name is missing in the swap command.
Patch 67.00 OSF505-062A	Patch: Fixes a problem with routines in the libst library State: New. Supersedes patch OSF505-025A (34.00) This patch corrects the following problems: <ul style="list-style-type: none">• Fixes a problem with two routines in the libst library, st_obj_open() and st_obj_write(). The ability to change a file permission using these two libst routines is denied if group has write permissions.• Fixes a problem with two routines in the libst library, st_obj_open() and st_obj_write(). The ability to change a file permission using these two libst routines is denied if group has write permissions.
Patch 68.00 OSF505-063	Patch: Fix for vrestore problems State: New This patch corrects the following vrestore problems: <ul style="list-style-type: none">• A previous patch caused incomplete restores.• A warning message is displayed when the path for the first file in a group of hardlinks is created without using original protection codes and property lists.• A warning message is displayed and vrestore aborts if it fails to malloc space for a property list.• A message which had been inserted at the end of the message file, had the wrong message category (could cause messaging confusion).• An uninitialized variable in the code that restores property lists could cause malloc failures, memory faults, "error setting extended attributes", and infinite loops using the -l option.• Corrupted property list information could cause an infinite loop.
Patch 69.00 OSF505-064	Patch: Updates the lfa ATM device driver to V1.0.17 State: New This patch updates the lfa ATM device driver to V1.0.17 and adds some enhancements as well as a fix for a kernel memory fault seen when either shutting down or restarting the device driver.
Patch 70.00 OSF505X11-003B	Patch: Static library fix for libDXm State: New This patch fixes a problem in which the svn widget of libDXm.so creates identical backgrounds and foregrounds.

Table 2–2: Summary of Base Operating System Patches (cont.)

Patch 71.00 OSF505-013B	Patch: Static library fix for libevm State: New This patch fixes the following EVM problems on some Alpha EV6 systems: <ul style="list-style-type: none">• evmshow and the event viewer will display timestamps that are incorrect by one hour for binlog events when Daylight Savings Time is in effect.• When a binlog event is being displayed on a system located in a different timezone from the system that originally posted the event, the time may be displayed as local time for the posting system. This is inconsistent with the way time is displayed by other utilities, including DECEvent and Compaq Analyze.
Patch 72.00 OSF505-025B	Patch: Cannot change file permission using libst routines State: New This patch fixes a problem with two routines in the libst library, st_obj_open() and st_obj_write(). The ability to change a file permission using these two libst routines is denied if group has write permissions.
Patch 73.00 OSF505-062B	Patch: prof profiling tool causes segmentation fault State: New This patch fixes a segmentation fault problem with the profiling tool prof. The problem is in library routines that access the line number information in the symbol table, and can affect other commands that look at the symbol table.
Patch 74.00 OSF505-030B	Patch: Security (SSRT0636U) State: New A potential security vulnerability has been discovered where, under certain circumstances, system integrity may be compromised. This may be in the form of improper file or privilege management. Compaq has corrected this potential vulnerability.
Patch 75.00 OSF505DX-008	Patch: Fix for System Management Station daemon State: New This patch fixes the following problems with the System Management Station daemon: <ul style="list-style-type: none">• The System Management Station daemon (smsd(8)) will intermittently crash.• The SysMan Station client will intermittently fail to launch a tool.
Patch 76.00 OSF505X11-006A	Patch: Security (SSRT0656U) State: New A potential security vulnerability has been discovered where, under certain circumstances, system integrity may be compromised. This may be in the form of improper file or privilege management. Compaq has corrected this potential vulnerability.
Patch 77.00 OSF505-067	Patch: Fix for AdvFS kernel memory fault problem State: New. Supersedes patches OSF505-039 (48.00) This patch corrects the following problems: <ul style="list-style-type: none">• Fixes a problem where the output of a ps command, the PAGEIN column reports 0 for all processes.• Fixes an AdvFS problem where under the right conditions a Kernel Memory Fault panic can occur while writing to an Atomic Data Logging file.

Table 2–2: Summary of Base Operating System Patches (cont.)

Patch 78.00 OSF505-069	Patch: Fix for advscan utility State: New This patch fixes a problem where, when a disk partition exactly overlaps an AdvFS partition, the advscan utility would erroneously act as if both partitions belong in the domain.
Patch 79.00 OSF505-077A	Patch: Fix for pax and vdump problems State: New. Supersedes patch OSF505-012 (21.00) This patch corrects the following problems: <ul style="list-style-type: none">• Fixes a cpio hanging problem in the Japanese locales.• Fixes the following pax and vdump problems:<ul style="list-style-type: none">– The pax/tar command opens and truncates pre-existing files while extracting from an archive. This can cause problems when performing an update install.– The vdump command will backup automount symbolic links as files in a directory section. A restore of this link would then prevent automount from changing a directory file to a symbolic link file.
Patch 80.00 OSF505-068	Patch: Fix for threaded applications problem State: New This patch fixes a problem where threaded applications built on DIGITAL UNIX V3.2 era systems may encounter an unresolved reference to <code>_pthread_init_routine</code> when run on a Tru64 UNIX V5.0A system.
Patch 81.00 OSF505-072	Patch: Fix for <code>dn_setup</code> core dump State: New This patch fixes a problem where <code>/sbin/dn_setup</code> will core dump during the boot process. The following error is displayed: <code>/sbin/dn_setup: 1572936 Memory fault - core dumped</code>
Patch 82.00 OSF505-073	Patch: SCSI device registered as non-shared State: New. Supersedes patches OSF505-036 (45.00), OSF505-037 (46.00), OSF505-035 (44.00) This patch corrects the following problems: <ul style="list-style-type: none">• Fixes the following two problems in the I/O subsystem:<ul style="list-style-type: none">– Only the first byte of the HSZ serial number is checked.– The time allowed for the command timeout on AIT tape drives is increased to from 5 seconds to 5 minutes.• Fixes a problem in which a reboot will fail after <code>hwmgmr</code> is used to delete or add devices.• Corrects a kernel memory fault caused by <code>hwmgmr</code>.• When using the <code>hwmgmr -edit scsi</code> command to make a nonshared SCSI device have a unique identifier, the SCSI device should be registered with the hardware management code as shared. Prior to this fix, the SCSI device was still being registered as nonshared.
Patch 83.00 OSF505-066	Patch: <code>SCSI_MC_GENERIC-READ_ELEMENT_STATUS</code> fails State: New This patch fixes a problem in which the <code>SCSI_MC_GENERIC-READ_ELEMENT_STATUS</code> fails with an <code>ioctl</code> return status of -1 and an "i/o error" message.

Table 2–2: Summary of Base Operating System Patches (cont.)

Patch 84.00 OSF505-074	Patch: Corrects a hardware probe time hang State: New This patch corrects a hardware probe time hang that may occur when booting.
Patch 85.00 OSF505-075	Patch: Fixes CAM disk problems State: New This patch fixes the following CAM disk problems that occur occasionally only during heavy I/O: <ul style="list-style-type: none">• EPERM errors are reported to the application when a device is reopened.• A device may become unavailable to DRD and will failover even if there is a viable path to the device.
Patch 86.00 OSF505-070	Patch: Fix for rm_state_change panic State: New. Supersedes patch OSF505-057 (63.00) This patch corrects the following: <ul style="list-style-type: none">• Fixes a problem in the memory channel driver which could result in panics with rm - inconsistent local spinlock structures being logged.• Fixes a system panic that involves state changes on MC2 virtual Hub configurations. The panic message on the console is: rm_state_change: panic (cpu 0): ERROR: DATA APPEARS CORRUPTED

Table 2–2: Summary of Base Operating System Patches (cont.)

Patch 87.00 OSF505-071	<p>Patch: Security (SSRT0636U) State: New. Supersedes patches OSF505-004 (13.00), OSF505-015 (24.00), OSF505-030A (39.00), OSF505-031 (40.00), OSF505-061 (92.00), OSF505-044 (52.00)</p> <p>This patch corrects the following problems:</p> <ul style="list-style-type: none">• The regular expression logic used by grep did not indentify matches that involved expressions with multiple subexpressions and alternate pattern.• Corrects the error handling when invalid multibyte sequences are encountered by the vi, ex or more commands.• Fixes a problem in libc where gmtime() would return a tm struct containing an incorrect tm_zone abbreviation if previous calls to both gmtime() and localtime() were made.• potential security vulnerability has been discovered where, under certain circumstances, system integrity may be compromised. This may be in the form of improper file or privilege management. Compaq has corrected this potential vulnerability.• Fixes a problem in libc that affects debugger tracebacks of code containing split procedures.• Corrects a permission denied error when writing to the /var/tcb/files/dblogs/[logfile] while running pop3d and enhanced security.• Corrects a problem of the rsh command displaying a warning message instead of the rsh command output when C2 security is configured.• Fixes the following Security problems:<ul style="list-style-type: none">– The sia_get_groups() interface where threads other than the main thread in a multi-threaded programs do not receive the correct values in the returned group list.– During an updateinstall from DIGITAL UNIX V4.0F to Tru64 UNIX V5.0A, the Enhanced Security databases are not converted to the new file format and subsequent login attempts will fail. The following messages are displayed in the /var/adm/smlogs/it.log file: it.log: db_load: /tcb/files/auth.db2: Bad file number it.log: db_load: /var/tcb/files/auth.db2: Bad file number
Patch 89.00 OSF505-076	<p>Patch: Adding swap partition less than 8KB causes problems State: New. Supersedes patch OSF505-054 (60.00)</p> <p>This patch corrects the following problems:</p> <ul style="list-style-type: none">• Fixes a kernel memory fault in u_anon_faultpage() when it accesses the backing object for the anonymous page.• Fixes a situation in which adding swap space results in system instability.
Patch 90.00 OSF505-081	<p>Patch: versw command can core dump during rolling upgrade State: New</p> <p>This patch fixes a problem where the versw command can core dump during a rolling upgrade.</p>
Patch 91.00 OSF505-040	<p>Patch: Performance problem in Cluster File System State: New</p> <p>This patch fixes a problem that has the potential to cause a noticeable performance degradation in the Cluster File System on systems that perform large writes.</p>

Table 2–2: Summary of Base Operating System Patches (cont.)

Patch 95.00 OSF505-082A	Patch: Overlap checking in MKFDMN and NEWFS fails State: New This patch fixes a problem where overlap checking in MKFDMN and NEWFS would fail for third-party drives used in a cluster.
Patch 96.00 OSF505-084	Patch: Fix for sendmsg, nsendmsg, recvmsg, and nrecvmsg State: New. Supersedes patches OSF505-019 (28.00), OSF505-020 (29.00), OSF505-034 (43.00), OSF505-041 (49.00), OSF505-047 (55.00), OSF505-048 (56.00), OSF505-050 (58.00), OSF505-007 (16.00), OSF505-008 (17.00), OSF505-009 (18.00), OSF505-065 (93.00), OSF505-079 (88.00), OSF505-083 (94.00) This patch corrects the following problems: <ul style="list-style-type: none">• Fixes a problem that causes corruption in the floating point registers whereby the flag fields <code>nxm_fp_owned</code> are overwritten with 0s.• Fixes "can_replace: slot replacement mismatch" panics which can occur when running multithreaded applications.• Fixes a problem in which metadata buffers are being written asynchronously instead of on a delayed basis.• Fixes a problem in which the POSIX interval timer is not resilient to clock slowdown caused either by NTP or by a backwards change of the clock.• Fixes a problem where if the size of the message queue was increased, writers to the queue that were blocked would not wake up for processing.• Fixes a problem where the system appears to hang. A child process is holding a lock too long and preventing other processes from doing work.• Fixes an "unaligned kernel space access from kernel mode" panic when doing a malloc from <code>kmembucket 26</code>, 896 byte bucket. The faulting virtual address will be the lock signature for <code>thread_deallocate()</code>.• Fixes a <code>simple_lock</code> time limit exceeded panic due to an SMP race condition in namecache.• Fixes a bug such that when <code>'fuser -k'</code> is issued on a dismounted NFS mount point in which some process is running, a hang will occur.• Fixes a race condition in the UBC code where a lookup is done on a page being invalidated (freed).• Fixes a hang or <code>simple_lock_state_violation</code> panic in biodone.• Fixes a system panic in <code>cfs_unmount</code>. The panic string is: <pre>cfs_unmount: panic("VFS_UNMOUNT failed ")</pre> This is caused by a race condition in <code>ubc_invalidate()</code> where pages could be missed if they transition from the clean list to the dirty list.• Fixes "simple_lock: time limit exceeded" system panic either from <code>cache_lookup()</code> or <code>cache_enter()</code>. This is caused by the namecache LRU list getting corrupted.• Fixes a binary compatibility problem for the four system calls; <code>sendmsg</code>, <code>nsendmsg</code>, <code>recvmsg</code>, and <code>nrecvmsg</code> were not preserved between V4.0x and V5.x releases.

Table 2–2: Summary of Base Operating System Patches (cont.)

Patch 97.00 OSF505-085	Patch: Fixes a problem with the dlsym routine State: New This patch fixes a problem with the dlsym() routine. The problem was that dlsym() would perform a ring search when locating symbols in a library that was linked with the -B symbolic linker flag. The dlsym() search in this case should only be a depth search. With this fix, only the selected library and its dependencies will be searched. The search will not continue to the application and its dependencies.
Patch 98.00 OSF505-077B	Patch: pax opens and truncated pre-existing files State: New This patch fixes the following pax and vdump problems: <ul style="list-style-type: none">• The pax/tar command opens and truncates pre-existing files while extracting from an archive. This can cause problems when performing an update install.• The vdump command will back up automount symbolic links as files in a directory section. A restore of this link would then prevent automount from changing a directory file to a symbolic link file.
Patch 99.00 OSF505-082B	Patch: MKFDMN NEWFS fails for third party drivers in cluster State: New This patch fixes a problem where overlap checking in MKFDMN and NEWFS would fail for third-party drives used in a cluster.
Patch 100.00 OSF505X11-006B	Patch: Security (SSRT0656U) State: New A potential security vulnerability has been discovered where, under certain circumstances, system integrity may be compromised. This may be in the form of improper file or privilege management. Compaq has corrected this potential vulnerability.
Patch 101.00 OSF505-092	Patch: Fixes various printing problems State: New. Supersedes patch OSF505-017 (26.00) This patch fixes the following printing problems: <ul style="list-style-type: none">• When using the I18N ya option, the queue daemon filters will terminate after 32 jobs.• Under certain circumstances, print jobs are terminated when printing to certain printers that are connected to a DECserver through TCP/IP.• The read-backs for remote connections cause an additional 2-second timeout, which may cause a job-submit failure on the job-number wraparound.

Summary of TruCluster Software Patches

This chapter summarizes the TruCluster software patches included in Patch Kit-0001.

Table 3–1 lists patches that have been updated.

Table 3–2 provides a summary of patches in Patch Kit-0001.

Table 3–1: Updated TruCluster Software Patches

Patch IDs	Change Summary
Patches 1.00, 5.00, 8.00, 11.00, 12.00, 13.00	New
Patches 6.00, 7.00, 9.00, 10.00	Superseded by Patch 11.00
Patches 2.00, 4.00	Superseded by Patch 12.00
Patch 3.00	Superseded by Patch 13.00

Table 3–2: Summary of TruCluster Patches

Patch IDs	Abstract
Patch 1.00 TCR505-005	<p>Patch: mounts that return ESTALE may loop forever</p> <p>State: New</p> <p>This patch fixes a problem where mounts that return ESTALE may loop forever.</p>
Patch 5.00 TCR505-004	<p>Patch: Fixes a kernel memory fault panic</p> <p>State: New</p> <p>This patch fixes a kernel memory fault panic in routines <code>cfstok_find_held_tok</code>. This is caused when the very first action of a new allocated thread is a lookup in an NFS filesystem of ".".</p>
Patch 8.00 TCR505-008	<p>Patch: Fix for MC2 vhub cluster panic</p> <p>State: New</p> <p>If <code>lockmode</code> has been set to 4, booting an MC2 vhub cluster generates the following panic on the second node booting:</p> <pre>simple_lock: uninitialized lock panic (cpu 0): simple_lock: uninitialized lock</pre>

Table 3–2: Summary of TruCluster Patches (cont.)

Patch 11.00 TCR505-013	<p>Patch: Problem with booting and shutting down cluster nodes</p> <p>State: New. Supersedes patches TCR505-003 (6.00), TCR505-007 (7.00), TCR505-010 (9.00), TCR505-012 (10.00)</p> <p>This patch corrects the following problems:</p> <ul style="list-style-type: none">• Fixes a situation which has caused a node panic with the following message: SIMPLE_LOCK: TIME LIMIT EXCEEDED PANIC ON SHARED TAPE• Solves a problem with booting and shutting down cluster nodes while using a tape (or changer) device in a V5.0A cluster• Fixes a problem where a mount command will hang after DRM has restored the path to an HSG80 storage volume.• Fixes a problem where a path will fail after DRM has restored the path to an HSG80 storage volume.• Fixes a problem where on a cluster node, if a new device is detected by a HW scan while the cluster is up running, one of the following situations can occur:<ul style="list-style-type: none">– Only one node will be able to use the device; if the device is Fiber Channel.Or,<ul style="list-style-type: none">– There is a small risk for data corruption on parallel SCSI device on a shared bus if the node subsequently loses quorum.
Patch 12.00 TCR505-014	<p>Patch: Improves cluster communication performance</p> <p>State: New. Supersedes patches TCR505-006 (2.00), TCR505-002 (4.00)</p> <p>This patch corrects the following problems:</p> <ul style="list-style-type: none">• Fixes a system panic that can be caused by Memory Channel errors occurring when the system is under heavy load.• Improves cluster communication performance including file system mount times.• Corrects problems seen when both a member is leaving and joining the cluster at the same time.
Patch 13.00 TCR505-018	<p>Patch: Problem seen when running clu_upgrade preinstall cmds</p> <p>State: Supersedes patch TCR505-009 (3.00)</p> <p>This patch fixes the following: Delivers a new stripped clu_genvmunix and several fixes to the cluster rolling upgrade procedure.</p> <p>Problem seen when running clu_upgrade preinstall commands on certain multi-cpu systems. Numerous error messages similar to the following are seen:</p> <p>*** Error *** Could not create: ocolsocols/.Old..ocols</p> <p>If you see this problem enter a Ctrl/C and rerun the clu-upgrade preinstall command.</p>
