

UnixWare 7.1.4 – New features

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Problems Fixed in UnixWare 7.1.3 Update Pack 4

Problems Fixed in UnixWare 7.1.3 Update Pack 4

Update Pack 4 (**uw713up4**) contains all the fixes from Maintenance Pack 1 (**uw713mp1**), Maintenance Pack 2 (**uw713mp2**), Maintenance Pack 3 (**uw713mp2**), Update Pack 1 (**uw713up1**), Update Pack 2 (**uw713up2**), and Update Pack 3 (**uw713up3**), plus additional fixes. See the lists below. The identifiers at the end of each description are SCO escalation and problem report numbers.

Problems fixed in Maintenance Pack 1

Problems fixed in Update Pack 1

Problems fixed in Maintenance Pack 2

Problems fixed in Update Pack 2

Problems fixed in Update Pack 3

Problems fixed in Update Pack 4

Problems Fixed in Update Pack 2 Supplemental Packages

Problems Fixed in Update Pack 3 Supplemental Packages

Problems Fixed in Update Pack 4 Supplemental Packages

Problems fixed in Maintenance Pack 1

uw713mp1 contained the following fixes:

1. Prevents system panics previously caused when **fusers** examines an exiting process.
fz526462
2. Prevents hangs seen on Compaq ML350 and ML370 Systems when hyperthreading (Jackson Technology) is enabled, i.e., when the boot parameter `ENABLE_JT` is set to YES.
fz526444
3. Fixed problems with the CDE desktop help viewer.
fz526501
4. Provides missing **scoadmin filesystem** files that were not installed when upgrading from UnixWare 7.1.1 or Open UNIX 8.0.0.
fz526550
5. Provides updated `/usr/include` files that were not installed when upgrading from UnixWare 7.1.1 or Open UNIX 8.0.0.
fz526552
6. Provides a new **makewhatis(1M)** command that was not installed when upgrading from UnixWare 7.1.1 or Open UNIX 8.0.0.
fz526526
7. Fixed **crash(1M)** to recognize changes to the *callout* structure.
fz518517
8. Fixes issues target disk driver error recovery.
fz520729

Problems fixed in Update Pack 1

uw713up1 contains all the fixes listed above for **uw713mp1**, plus the following additional fixes. Fixes listed with (MP2) at the beginning of the description are also included in Maintenance Pack 2 (MP2); see Problems fixed in Maintenance Pack 2.

Security Fixes

9. (MP2) Closing file descriptors 0, 1 and/or 2 before **exec**'ing a **setuid** program can make this program open files under these file descriptors, which have special meanings for **libc** (`stdin/stdout/stderr`). Reading or writing to root-owned files can be made possible, since `stdin/stdout/stderr==opened_file`.
erg712059/fz526562/CSSA-2002-SCO.43
10. (MP2) A rogue **talk** client is able to cause the **talk** demon to overrun a buffer, and could be able to compromise a machine running **talkd**.
erg712055/fz521053/CSSA-2002-SCO.42
11. (MP2) Buffer overflow in XPR portion of *libnsl* library.
erg712182/fz526861/CSSA-2003-SCO.7
12. (MP2) A command line buffer overflow in **ps** command can be exploited.
erg712109/fz525292/CSSA-2003-SCO.1
13. (MP2) The implementation of *xdr_array* can be tricked into writing beyond the buffers it allocated when deserializing the XDR stream.
erg501642/fz525725/CSSA-2003-SCO.7
14. (MP2) Fixed a security vulnerability in the **sendmail** binary that can be exploited by remote users to gain root access.
fz527484/erg712247/CSSA-2003-SCO.5
15. (MP2) When using **ftp** to transfer a file with a pipe as the first character in its name (for example, `|xyz`), **ftp** executes the file on client machine.
erg712227/fz527425/CSSA-2003-SCO.3

Networking Fixes

16. (MP2) Panic in PPP driver – *pppwsrv()* – due to a race condition.
erg501673/fz526330
17. (MP2) Panic in PPP's **pcid** driver.
erg501650/fz525867
18. (MP2) Communication problem between **pcid** and **ppp** driver.
erg501678/fz526352
19. (MP2) The **ttymon** process sometimes stops listening to a port after PPP disconnect.
erg501634/fz525626
20. (MP2) When receiving data from a TCP socket it may lock up indefinitely with data buffered up in the kernel but never returned to the process.
erg501604/fz520887
21. (MP2) Connection server fails with the following error:

```
10/24/02 17:14:51; 27209; cs: ioctl() set signal error; errno=22
```


erg712153/fz526540
22. (MP2) Improved network printing performance.
erg712041/fz520932
23. (MP2) If an **ftp** client host was reset (as in cycling the power) during the data transmission to the server, the **ftp**-data connection never times out on the server. If the client tries to use again the same port after reboot for an **ftp** transmission, the server responds with EADDRINUSE.
erg501703/fz526973
24. (MP2) After removing a network interface, **pkgchk nics** complains about missing files.
erg712152/fz526505

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25. (MP2) Repeated logins on virtual terminals (*/dev/vt02 ... /dev/vt08*) result in file descriptor leakage in **ttymon**.
erg501636/fz525650
26. (MP2) When excessive short-lived **rlogin** sessions are being created, */var/adm/wtmp* and */var/adm/wtmpx* get out of sync and must be rewritten. While these files are being rewritten, no one can **rlogin** to the system. If these files grow quite large, this can take up to 20–30 minutes. Also under heavy load the short-lived **rlogin** sessions may leave in *utmp* the entries from sessions that have actually completed.
fz526496/erg712151
27. (MP2) Can't write to **/dev/_tcp/num** tty device (**rlogin** connection).
erg712250/fz526110
28. (MP2) Occasionally *bind()* returns EADDRINUSE for no apparent reason.
erg712209/fz527217
29. (MP2) Fixed tape driver bug relating to SAN attached tape drives.
erg712195/fz526396
30. (MP2) Fixed an NFS panic which can occur following certain types of transmission errors.
fz526648
31. (MP2) Cleaned up code which handles dispatching of *tcp* timers.
fz526796
32. (MP2) Panic in *tcp_close*.
fz527439/erg712230
33. The function **write(2)** erroneously returns EISCONN on a raw socket.
erg501681 fz526404
34. Fixed an NFS hang which can occur when mounting an NFS file system.
fz526665
35. Unplugged network cable causes terrible interactive console performance.
fz520663
36. System panic while running LSV **inet** stress tests (GetService).
fz526345
37. The utility **cs(1Mbnu)** fails to include the phone number.
erg501670, fz526315
38. PPP stability and scalability improvements.
fz527328

Miscellaneous Fixes

39. (MP2) Multi-threaded application may hang in an unkillable *sleep*, during *exec*.
erg712172 fz526750
40. (MP2) Fix for **sdiadd -n** panic on systems with a pre-DDI8 Host Bus Adapter (HBA). The problem was that *sdi_hot_add()* was not converting the older style SCSI address into the newer extended SCSI addressing scheme properly. The original fix set the address to -1's instead of 0's for the wildcard case. *pdi_hot* will set the SCSI address to all -1's to tell SDI that we want to scan the entire SCSI bus starting from absolute address 0/0/0/0 (controller/bus/target/lun).
erg712223 fz527360
41. (MP2) Added minor command modifications required by The Open Group for UNIX95 certification. For details, see UNIX95 Conformance.
fz526395/fz526629/fz527377
42. (MP2) The **emergency_disk(1M)** boot media hangs on system with more than 4 GB RAM.
fz527578
43. (MP2) Added undocumented option **noquota** to the **vxfs mount** command to fix the problem where the output of **mount -p** when used in */etc/vfstab*, is rejected by **mount** with the message:

Problems Fixed in UnixWare 7.1.3 Update Pack 4

UX:vxfs mount: ERROR: illegal -o suboption -- noquota

erg712190 fz526894

44. (MP2) The kernel can panic in *mod_dev_load* if a DDI8 driver does not get configured properly.
fz526791
45. (MP2) Repeated logins on virtual terminals (*/dev/vt02 ... /dev/vt08*) result in file descriptor leakage in **ttymon**.
erg501636 fz525650
46. System hangs due to multiple, racing calls to *stropen*.
erg501706 fz527158
47. **lint**(1) previously warned about *_nanf()* and *nanf()* in *math.h*. Adding a */*LINTED*/* line in front of each suppresses this noise.
fz527588
48. The utility **cs**(1Mbnu) exits unexpectedly due to *fork*(2) failure.
erg501710 fz527253
49. The **emergency_rec**(1M) command doesn't ignore commented entries in */usr/lib/df/tapeconfig*.
fz527399
50. The command **pwck**(1M) should print the line being processed, when errors are encountered.
erg712157 fz518020
51. Fix locking of CD-ROM tray.
fz527497
52. The command **sar -d** returns busy values > 100%
fz521100 erg501658
53. Fixed bugs which caused the licensing daemons (**ifor_pmd**, **ifor_sld**, and **sco_cpd**) and the **idmknodd** daemon to be killed on transitions to **init** state 1 and never restarted.
fz526649, fz526656
54. The **mousemgr** process could not be run in init state 1.
fz527032
55. Updated **/sbin/usb** to only run when *usbd* is configured.
fz527495
56. Fixed potential problem evaluating constant expressions in *full_optimization* **asm**(1) functions.
fz527501
57. Panic in the routine *v86bios0()*.
fz526652
58. Include support tool **sysinfo**(1M) in shipping product.
fz519999
59. Intel's fix for p6update panics on prototype Pentium 4 Xeon system.
fz521607
60. Kernel panic in *kmem_alloc*, from *tcpopen*.
fz521356
61. New tunable **COREFILE_SECURE**. Privileged, **setuid** or **setgid** processes are prohibited from dumping core. A new tunable **COREFILE_SECURE**, if tuned to 0, will allow such processes to core dump.
fz526524/erg712163
62. System hangs sporadically after calling *execv* directly after *fork1* in multithreaded applications.
fz526597
63. Netscape postscript printing in **kole** (Korean) environment is broken.
fz520071
64. If the Skunkware **ghostscript** package is installed, the PostScript files (such as those printed by Netscape) can be automatically converted for printing on the PCL printers (such as HP LaserJet). An example of command to enter in the Netscape print dialog:

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lp -T PS

- 65. Correctly display version of **dump** command with **-V** option.
fz518607
- 66. Fix for missing charset attribute for Japanese documentation in DocView.
fz526356

Development Fixes

- 67. Assembly peep-hole optimizer (**optim**) fix for three operand integer multiplication by one which was not caught by the global optimizer on C++ code.
fz526555
- 68. C++ compiler fix: Unless in strict ANSI mode, allow an undefined inline function to be referenced if the point of reference is never used.
fz526499 fz526480
- 69. Debugging information for a "long long" local variable assigned to register pair `%ebx/%esi` was incorrectly stated as `%ebx/%esp`. C and C++ compilers fixed.

Compatibility Fixes

- 70. (MP2) Fix for panic on certain OpenServer binaries.
erg550013/fz514721
- 71. (MP2) *chown()* arguments of `-1` do not work for OpenServer binaries
fz526683

Problems fixed in Maintenance Pack 2

uw713mp2 contains all the fixes listed above for Maintenance Pack 1, the fixes marked (MP2) delivered with Update Pack 1, plus the following fixes:

Security Fixes:

- 72. **uudecode** does not validate the filename; it should not write to pipes or symbolic links.
CSSA-2002-SCO.44

Networking Fixes:

- 73. KMA corruption in *tcp*.
fz521356/erg712086
- 74. Status requests are not being automatically generated for a network printer if it is very busy resulting in job ids not being freed.
erg501666/fz526164
- 75. Hangs and delays in streams caused by streams routines unnecessarily allocating large physically contiguous buffers.
fz527550/erg712266

Compatibility Fixes:

- 76. Fixed system call restart code for OpenServer applications. Also modified code for the connect system call so that connect is properly restartable for OpenServer applications.
fz527264

Problems Fixed in UnixWare 7.1.3 Update Pack 4

77. System hangs during boot up on older (Pentium III and earlier) IBM hardware.
fz527522
78. Allow use of an ELF interpreter which contains a PT_NOTES section, as some older OpenServer libraries do.
fz527571
79. Enable 16-bit IPC IDs for OpenServer and Xenix compatibility.
fz527373
80. Implement support of MAP_NOEOF *mmap* flag for OpenServer applications running on UnixWare.
fz527536

Miscellaneous Fixes:

81. Fixed an unrecoverable "internal error" experienced by the **debug** command when reading some core files from threaded applications. Fixed the recently added **-m** command line option to specify an alternate runtime library path when analyzing core files from other systems.
erg501675/fz526224/fz526635/fz526681
82. The **vtoc** driver has been fixed to support disks whose physical sector size is an integral multiple of 512.
erg501717/fz527726
83. System may refuse to take console input after 248 days, thereby appearing to hang, due to invalid time stamps in the **cmux** driver.
fz527517/erg501720
84. The command **useradd(1M)** allows \$ in usernames (SAMBA requirement)
fz526483
85. The **ksh95** built in **pwd** command can output pathnames starting with //.
fz199364
86. PSE memory remains unavailable after dynamically adding memory.
erg712235/fz527455
87. System hangs in **vxfs** filesystem. Processes blocked waiting on a call to *vx_iget*.
erg712184/fz526355
88. Restore the pre-7.1.3 *lookupn* syntax so that third-party provided filesystems continue to work. The extra *root vnode* argument has been removed from *lookupn*. A new *lookupnx* function has been created with this extra argument.
fz527503

Problems fixed in the Update Pack 2 Set

uw713up2 contains all the fixes listed above for Maintenance Pack 1, Update Pack 1, and Maintenance Pack 2, plus the following additional fixes.

Networking Fixes:

89. Hangs and delays in streams caused by streams routines unnecessarily allocating large physically contiguous buffers.
fz527550 erg712266
90. If two **arp -d**'s are called in quick succession, one of the entries may not be deleted.
erg711628/fz516107
91. When DNS is not configured, mailadmin (scoadmin mail) will not allow you to change any settings.
erg712296/fz527783
92. System panic due to a race condition in tcp timers code.
erg501722/fz527554

Problems Fixed in UnixWare 7.1.3 Update Pack 4

93. Fixed scoadmin DNS Manager' abnormal terminations; fixed corruption of DNS/BIND's configuration and zone data files caused by scoadmin DNS Manager; fixed ndc/rndc utility and interactions with DNS/BIND.

fz518460 fz518604 fz521436

Compatibility Fixes:

94. If the name of remote system for a remote printer is not found in /etc/lp/Systems, lpsched does not complain at startup and later on coredumps when a status or cancel request is sent to that printer.

fz527931

95. Remote print requests remain indefinitely in queue if remote system is down. They do not timeout even if timeout parameter is specified in /etc/lp/Systems for the corresponding remote system.

fz527934

WARNING: Since by default the timeout is set to 10 minutes, print setups with large network delays may suddenly experience timed-out jobs. For such systems, system administrators should either increase the timeout value or set timeout to "never" to restore old behavior.

Miscellaneous Fixes:

96. System can refuse to take console input after 248 days, thereby appearing to hang, due to invalid time stamps in the **cmux** driver.

fz527517 erg501720

97. Short-lived floating point temp value may be left on the floating point stack when used within the second or third operand of a conditional operator. This may result in a floating point stack overflow.

fz527712

98. Potential floating point stack overflow detected in /usr/sbin/vxassist.

fz527712

99. Shell metacharacters that are part of the options to the C++ compiler are properly preserved (escaped) for reuse during recompilation done as part of C++ auto template instantiation.

fz527527

100. Fixed an unrecoverable "internal error" experienced by the debug command when reading some core files from threaded applications. Fixed the recently added '-m' command line option to specify an alternate runtime library path when analyzing core files from other systems.

erg501675 fz526224 fz526635 fz526681

101. The vtoc driver has been fixed to support disks whose physical sector size is an integral multiple of 512.

erg501717 fz527726

102. Fixed division by zero error in /usr/ccs/lib/optim encountered in calculating potential benefits of locals in a register for what appears to be a series of heavily nested loops.

103. Fix to ps -o time so that when the accumulated CPU time exceeds 24 hours, the number of days is no longer off by one.

fz527776/erg712295

104. Change the "enum boolean" tag in /usr/include/sys/types.h to "enum __boolean", removing the type/tag "boolean" from the user name space.

fz527818

105. Add support for Digi ClassicBoard/PCI and Connect Blue Heat serial cards.

fz527694

106. System hangs in vxfs filesystem. Processes blocked waiting on a call to vx_iget.

erg712184 fz526355

Problems Fixed in UnixWare 7.1.3 Update Pack 4

107. Restore the pre UnixWare 7.1.3 lookupp syntax so that third-party provided filesystems continue to work. The extra "root vnode" argument has been removed from lookupp. A new lookuppnx function has been created with this extra argument.
fz527503
108. Status requests are not being automatically generated for a network printer if is very busy resulting in job ids not being freed.
erg501666 fz526164
109. Display per-processor callouts as well as global callouts from the callout command.
fz527802
110. Enhanced the Printing subsystem to have a maximum of 999 printjobs per printer or class of printers rather 999 printjobs for the whole system.
erg501712/fz526370
111. Lpsched performs poorly when a large number of jobs (200+) are submitted at once.
erg501718/fz527462
112. The sdipath -o repair command can hang when run against active paths.
erg712254/fz527498
113. PSE memory remains unavailable after dynamically adding memory.
erg712235 fz527455
114. Periodic Local timeouts can migrate to global callout lists. If a driver uses a dtimeout interface to schedule a periodic callout on a particular cpu, the callout migrates to the global list after the first firing. This then allows allows callout to be scheduled on any cpu.
fz527675
115. scoadmin now includes a graphical disk manager
fz527823
116. xAPIC support for IBM xSeries x440 servers – allows multiple CECs to be used and more than 8 logical CPUs
fz526749 fz527522
117. Fix the ksh problem where an empty assignment (for example, ksh -c 'x=; echo \${x/y/z}') would cause a memory fault.
fz527943
118. Change umask to 022 so that /etc/ssh.pid is not world writable.
fz526605
119. Correct /usr/sbin/sshd binary to use /usr/X/bin/xauth instead of /usr/X11R6/bin/xauth.
fz526871
120. Added STO_386_COPY support to RTLD and the linker to aid in the evolution of the IA32 psABI.
fz527833
121. Add support for the BSD and Linux asprintf() and vasprintf() routines. These two routines are additional *sprintf() variations. Here, you pass the address of a "char *" into which is placed a malloc()d buffer of sufficient length to hold the entire sprintf() result. The caller is responsible for free()ing the buffer when done.
fz527834
122. Correct /usr/include/sys/nattr.h definition of NATTR_CSUM_MASK.
fz527534

Problems fixed in the Update Pack 3 Set

uw713up3 contains all the fixes listed above for Maintenance Pack 1, Update Pack 1, Maintenance Pack 2, and Update Pack 2, plus the following additional fixes.

Problems Fixed in UnixWare 7.1.3 Update Pack 4

Security Fixes:

123. Fixed exploitable buffer overflows in **metamail**.
erg712265 fz527543
124. Drop TCP packets when both SYN & FIN are set.
erg712274 fz527623
125. sendmail char sign extension buffer overflow. Upgraded to Sendmail 8.12.9.
erg712276 fz527629
126. DocView no longer permits certain URLs from reading publicly-readable system files.
fz528126 erg712368
127. **sendmail** remotely exploitable buffer overflow in prescan.
erg712433 fz528320 CSSA-2003-SCO.23

Networking Fixes:

128. Kernel panics with a bad read pointer in a STREAMS message block, caused by mishandling of the message block in the STREAMS utility msgpullup and in the IP protocol handling routine ip_input.
erg712321 fz527939
129. Some STREAMS *ioctl* commands involving multiple message exchanges with the driver may timeout prematurely and return EAGAIN erroneously.
erg712396 fz528199
130. Code generation error in **ppp** library.
fz528222
131. *flock()* hangs when the NFS server is Microsoft SFU (3.0)
erg712347 fz528048
132. Data corruption during TCP connection setup. A race condition could erroneously acknowledge enqueued data that has not been sent causing receiver to get partial data.
erg712389 fz528172

Development Fixes:

133. C/C++ inlining of a small function may attempt to use a FP constant as if it were an integer value in memory.
fz528225
134. Optimization bug fix. Optim may erroneously remove a structure return temp space from the stack.
fz528221:1
135. C++ compiler internal error if shift operator amount is a 64 bit data type.
fz528230
136. Warning diagnostic for **cc -Xc** about intermixed statements and declarations could be issued inappropriately.
fz527343
137. The *qsort()* routine was reworked to increase performance, especially when presented with lots of "equal" data items.
fz527984 fz528071
138. The C compiler's preprocessing inappropriately took a '_' as starting a fresh token when in the middle of a "ppnumber" token. In practice, this only had an effect on code which created identifier tokens through pasting.
fz528049
139. The *bsearch()* routine was improved to handle zero-valued "size" and "number of items" parameters.
fz528073
140. **cc -Xt** no longer warns about "return;" for functions whose return type is other than void.

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fz528120

141. A bug was repaired in which an inlined function call, having been passed a null pointer, would trigger an internal C compiler error when this parameter was the target of a *strcpy()* or *strncpy()* call.

fz528141

142. The obsolete *ustat()* routine has been moved from the unshared portion of the C library to the shared *libc.so.1*. The backward compatibility library *libcudk70.a* has an unshared *ustat()* added.

fz528274

143. The **strip** and **mcs** utilities no longer attempt to make use of the *rename()* system call to move the updated temporary file over the file being operated on.

fz528164

Miscellaneous Fixes:

144. When **pkgadd** fails early on, before any package has been selected, it gives the following message:
UX:mailx: WARNING: No message !?! This message was confusing to users and is now not displayed.

fz527750

145. When hyperthreading is enabled on a uniprocessor system without MPS BIOS tables, the system will attempt to use a standard two cpu multiprocessor configuration to enable hyperthreading.

fz527457

146. Hyperthreading is disabled (erroneously) on some systems.

erg712350 fz528053

147. System hang. Hard hang unable to enter **kdb** or dump the system.

erg712346 fz528045

148. **ksh93** autoload functions invoked within command substitution fail to execute.

erg712312 fz527879

149. **/etc/conf/bin/idconfupdate** now creates its *.idlock* file in */etc/conf* instead of */var/tmp*. This avoids *idtools* problems when */var/tmp* is not mounted.

fz528107:1 fz528129:1

150. **/etc/magic** expanded to recognize Java class files and SVR4 **pkgadd** datastream image files.

fz160445, fz527896

151. Large block sized i/o requests failing with Pre-DDI8 HBA drivers.

fz527917:1 erg712316

152. When reporting information for multiple files, **/usr/bin/file** may reference previously freed memory.

fz219396

153. Panic in **specfs**, NULL pointer dereference (*s_cp*).

erg712337 fz528010

154. **/usr/ucb/lastcomm** core dumps.

fz528025

155. **syslogd** fails to respond to **SIGHUP**.

erg712414 fz528159

156. **/etc/magic** has been expanded to provide recognition of more file types.

fz144358 fz528024

157. **/u95/bin/ksh** users' *`w`* idle time resets every 10 min.

erg712362 fz528070

158. Added *dacread*, *macread* privileges to */usr/lib/fs/vxfs/quota*.

fz528196

159. Fixed failures mounting/creating **vxfs** snapshots which indicated that the filesystem is either already mounted, busy, or the allowable number of mount point exceeded when none of these failure conditions were true.

erg712361 / fz528100:1

Problems Fixed in UnixWare 7.1.3 Update Pack 4

160. Fixed kernel stack overflows with **lxuwfs**, replacing relatively large stack variables with allocated areas. Matching change made to **lxdevfs**.
fz527910 / fz528131
161. **/sbin/dfspace** now does not list LKP and OKP mount points.
fz519343:1
162. Updated **kcrash** with bug fixes.
fz528295
163. Fixed **scoadmin** Slice Manager character mode display for cylinders and attributes views.
fz528041
164. Updated **mkmsgs**.
fz527996, fz528200
165. Updated **swap** command to handle swap files up to 4GB.
fz202265
166. Updated time zone data for India (IST).
fz526471
167. **ksh95** built in **pwd** can output pathnames starting with //.
fz199364
168. When installing UnixWare on some machines with the nVidia GeForce4 video chipset, the screen goes black and the machines freezes after the initial kernel is loaded and before the language selection screen. Separate boot floppies are required to install such a system. The fix delivered in UP3 ensures systems installed in such a manner continue to work.
erg712344 fz528030
169. USB chipsets using the optional EHCI 64-bit addressing modes no longer get "Descriptor Read Failure load failed during enumeration" on USB startup.
fz528043
170. The USB drive from Melco/Yedata no longer fails on USB startup with "Inquiry Read failed, unbinding".
fz528046
171. DocView Print Book feature now handles documents that were not properly assembled for printing.
fz527824
172. Support logical volumes up to 1 TB. **mkfs_vxfs** failed on logical volumes > 512GB and fdisk reported invalid cylinders in "1 TB boundary" cases.
fz520676 erg712311
173. The **queue** command within **crash** prints garbage at the end of the line.
fz528406
174. The **date** command core dumps. Attempting to update the time via SCAdmin will display an error message, although the time does get updated.
erg712397 fz528056
175. The **userdel** command core dumps.
fz528409

Problems fixed in the Update Pack 4 Set

uw713up4 contains all the fixes listed above for Maintenance Pack 1, Update Pack 1, Maintenance Pack 2, Update Pack 2, and Update Pack 3, plus the following additional fixes. Note that some of the fixes below were also include in Maintenance Pack 3; all Maintenance Pack 3 fixes are included in Update Pack 4.

Problems Fixed in UnixWare 7.1.3 Update Pack 4

Security Fixes:

- 176. SECURITY – CRLF (Carriage Return, Line Feed) injection vulnerability in lynx.
fz712379 fz528144
- 177. Security fix for OpenSSL version 0.9.7b. See <http://cvs.openssl.org/chngview?cn=11213>.
fz528383
- 178. Fixed */proc* security bug.
fz712482 fz528474
- 179. Fixed LKP chroot security vulnerability in *intpexec*
fz528642 erg712519

Networking Fixes:

- 181. Repaired a bug in the ftp daemon that would cause it to report "426 Data connection: Error 0" after a successful transfer.
fz528430 fz528034
- 182. Fixed problem where *rcp* of */proc* causes denial of service.
fz712112 fz525927
- 183. Fixed a bug in *traceroute* that would cause it to core dump.
fz528289
- 184. An optimization to predict the MAC header size is now a tuneable. A value of 0 allows the OS to discover the optimal header size. A value less than 0 disables the optimization and a value above 0 enforces the value specified in the tuneable. This is specifically useful for applications like IBM SNA Gateway which provides a media frame header size different than calculated by the OS.
fz527969
- 185. There are three new tuneables provided: *tcp_rexmit_min* to control the minimum retransmission timeout value, *tcp_rttflt* to specify a default initial RTT value and the *tcp_maxrxt_min* to allow configuration of cumulative minimum retransmission value.
fz527766

Development Fixes:

- 186. C/C++ inlining of a function or type "char *" into an expression that expects an integer type expression may result in an internal compiler error.
fz528442
- 187. *DT_RUN_PATH* formats accepted with the *-R* option of the *CC* (C++) command have been expanded to include *\$ORIGIN* and relative paths.
fz528471
- 188. The Java first-class executables feature has been upgraded to support Java 1.4.2.
fz528476
- 189. The 'fs' memory checking tool within the UDK C++ compilation system has been fixed to handle the C++ standard library <memory> header.
fz528482
- 190. Optimization bug fix. */usr/ccs/lib/optim* does not properly track source memory usage for the third operand of a three operand *SHLDL* instruction.
fz528620
- 191. The C++ compiler would emit incorrect code to handle object cleanup during exception handling throw processing, when the object was of a multidimensional array of classes type.
fz528674
- 192. C/C++ compilers may encounter an internal compiler error when handling a cast of a volatile type to a void type.

Problems Fixed in UnixWare 7.1.3 Update Pack 4

- fz528689
193. Fixed problem where programs linked with *libthread* that call `fork1()` from the original thread produce children that are not properly protected from signals in critical library code.
fz528522
194. Changed *libc*'s internal *%f* and *fcvt()* formatting to give a slightly more accurate result when more digits are requested than are handled internally.
fz528370
195. Corrected some exported *libc* symbols that should have been weak to be so.
fz528448
196. Fill-in some missing *iconv* (command and library routine) codeset conversion to permit direct conversion to/from UTF-8 and the following codesets: PC437, PC850, PC860, PC863, PC865, 8859/1, eucJP, and sjis. The same effect was available before this by using a "unicode" (UCS2) intermediate codeset target.
fz528539
197. Repair a *qsort()* bug in which an incorrect internal swap routine can be used.
fz528569
198. Changed the Motif (*libXm* and *libWXM*) libraries to be built using the system's *strcasecmp()* and register expression routines.
fz528651
199. Repaired a bug in *libthread* such that a null pointer can be dereferenced in *cond_broadcast()* after a *fork1()*.
fz528714
200. Changed *libthread*'s timer mechanism so it recognizes hard system clock resets.
fz712390 fz527957
201. Fixed RTLD *exit()* processing to prevent a segmentation fault observed when a loaded-at-startup shared library *dlopen()*s some other library and then uses its *_fini()* routine to *dlclose()* this other library. Previously, the RTLD *exit()* processing resulted in the *dlclose()* causing a segmentation fault as it attempts to modify memory through a null pointer.
fz528933

Miscellaneous Fixes:

201. Fixed panic in *realitexpire*.
fz712352 fz528064
202. The *rtpm* command incorrectly reports it is out of memory and exits; the time reported by *rtpm* gets out of sync with the system clock.
fz712441 fz528135 erg712393 fz528133
203. Shared memory that is in use by a process experiencing a fork failure might not be released.
fz712399 fz528204
204. System hang; infinite loop in *deadflck*.
fz712154 fz526541
205. **Ksh** sleep call is waiting forever due to missed SIGALRM.
fz712386 fz528169
206. The multibyte to wide-character conversion code for EUC was broken.
fz712507 fz528536
207. **cs** daemon allows 2 child processes to talk to the same device.
fz501731 fz527737
208. System call entry handler for linux binaries will panic if a real device is attached to the same vector or if a spurious interrupt is received on that vector.
fz712348 fz528051

Problems Fixed in UnixWare 7.1.3 Update Pack 4

209. Corrected permissions on various */etc/inst/locale/*/menus/LKP/lxrpm.smsgs* files. These permissions were correct for systems which had a fresh Unixware 7.1.3 ISL installation. The permissions were incorrect for customers who had upgraded from to UnixWare 7.1.3 from a prior UnixWare/Open UNIX release.
fz520137
210. MAXRUN is a new **cron** tuneable parameter in */etc/default/cron*. It defaults to 25 and defines the number of simultaneous cron jobs in the system.
fz712469 fz528435
211. Fix *libDtHelp* buffer overflow problem.
erg712445 fz528372
212. Fix bug in **mousemgr** which causes graphical login to fail to restart after logout when using a serial mouse.
fz528706
213. Ensure that */etc/conf/bin/idcpunix* invokes **rm -rf** from a directory with a known path to avoid certain failures which can occur when invoking */etc/conf/bin/idcpunix* (and therefore **rm -rf**) from a directory with no known path. Also, add the directory */etc/conf.unix.old/mod.d* to the loadable module search path after moving the current loadable module directory there.
fz527874 fz527875
214. The compress command dies with a SIGSEGV, and fails to compress the file.
fz712220 fz527292
215. Fixed problem where embedded EHCI on IBM 8430/13x took inordinate amount of time to reset.
fz501727 fz527381
216. Packaging change to **samba** and **sambamb** packages.
fz526999
217. sysi86 doesn't validate selector when clearing a descriptor.
fz521540
218. Updated Scoadmin Video Configuration Manager to stay set to VESA if configured to VESA and not switch to an autodetected video adapter configuration.
fz528393
219. */etc/magic* was updated to handle the OSR5 tar format.
fz528854:1
220. Auto-enabling of memory above 4GB. When the OS detects memory above 4GB, it automatically enables PAE mode in order to access the memory above 4GB. Previously, this had to be done manually, by setting `ENABLE_4GB_MEM=yes` in */stand/boot* followed by a reboot.
fz528501:3

Fixes Included in Update Pack 2 Supplemental Packages

The following fixes are not included in the Update Pack Set; they are installed with the indicated package provided on the Update Pack CD. See Update Pack CD Contents.

1. **adst70** – Provide updated adst70 HBA driver to prevent a panic going into init 1.
fz527526
2. **basex** – Avoid potential duplicate data being flushed from buffers when the child process, used for initial house keeping, in the pseudo tty client open transport function exits.
fz527709
3. **nd** – Updated Intel PRO/100 driver (eeE8) to version 2.5.4. Bug fixes and new card support.
fz527508 fz527922
4. **nd** – Updated Intel PRO/1000 driver (e1008g) to version 7.0.11. Bug fixes and new card support.
fz527502 fz527911

Problems Fixed in UnixWare 7.1.3 Update Pack 4

5. **nd** – Correct typos in Intel PRO/1000 (e1008g) Drvmap file affecting hotplug support for certain NICS.
fz527792
6. **nics** – Short Ethernet frames are now padded with octets of zero to prevent information leakage.
erg712090 fz521367
7. **openssh** – SECURITY Provide rlogin/telnet login replacements to correct flawed kill routine.
fz526587
8. **openssl** – SECURITY Upgraded OpenSSL version to fix timing attack vulnerability.
fz527507
9. **samba** and **sambamb** – SECURITY Upgraded Samba version to fix security holes where anonymous or remote users could gain root access.
fz527530 fz527681
10. **xdrivers** – Matrox G100/G200/G400 Series Graphics driver (mtx) doesn't close pcix driver causing xserver package to hang during installation.
fz527729
11. **xdrivers** – Provide support for Nvidia TNT2, GeForce2 and Quadro2 Graphics adapters.
fz527795
12. **zlib** – SECURITY Fix a zlib (gzprintf) format string overflow vulnerability by rebuilding the zlib library to use snprintf().
fz527490

Problems Fixed in Update Pack 3 Supplemental Packages

The following fixes are not included in the Update Pack Set; they are installed with the indicated package provided on the Update Pack CD. See Update Pack CD Contents.

13. **basex**, **j2jre131**, **xfonts** – The `/usr/lib/X11/fonts/TrueType/watanabe-mincho.ttf` Japanese font has been removed from these packages, and is removed from the system when you install these packages on top of a previous version.
fz528440
14. **nd** – Updated Intel PRO/1000 driver (e1008g) to version 7.2.10. Bug fixes and new card support.
fz528257
15. **nd** – Updated Broadcom NetXtreme Gigabit Ethernet driver (bcme) to version 6.0.16. Corrects panic in bcopy+13 with bcme v6.0.3.
fz527953 fz528305
16. **netmgmt** – The SNMP trap_rece utility trap_rece quits prematurely with the error message `Couldn't assign requested address`.
erg712289 fz527728
17. **nics** – A new **dlpi** driver tuneable in `/etc/conf/pack.d/dlpi/space.c` allows the administrator to turn off MAC header size prediction, which causes problems on IBM SNA Gateway systems. See Known Problems.
527969
18. **nics** – Changed **ndcfg** for PCI device recognition to fix a bug which prevented some serial port boards from being recognized.
erg712319 fz527935

Problems Fixed in Update Pack 4 Supplemental Packages

The following fixes are not included in the Update Pack Set; they are installed with the indicated package provided on the Update Pack CD. See Update Pack CD Contents.

Problems Fixed in UnixWare 7.1.3 Update Pack 4

19. **apache** – Updated to 1.3.29 to pick up latest fixes.
 20. **nd** – Fixed 'nd' package menu option #2 install. Install failed to work properly when installing on either UnixWare 7.1.1 or Open UNIX 8.0.0.
fz527574
 21. **nd** – Updated AMD PCnet driver (pnt) to version 3.0.1. Fixes a panic that appeared in bcopy().
fz527095
 22. **nd** – Updated 3Com EtherLink DDI8 driver (e3bc) to version 1.1.1. Fixes a bad ASSERT panic in the DEBUG kernel on startup. Only occurs in DEBUG kernel.
fz528447
 23. **nd** – Updated Intel PRO/100 driver (eeE8) to version 2.6.8. Bug fixes and new support.
fz528724
 24. **nd** – Updated Intel PRO/1000 driver (e1008g) to version 7.2.15. Bug fixes and new support.
fz528381
 25. **nd** – Updated Broadcom NetXtreme Gigabit Ethernet driver (bcme) to version 7.0.7. Bug fixes and new card support.
fz528589
 26. **nd** – Updated **tcpdump**(1M) command to fix the following security vulnerabilities:
 - ◆ A vulnerability existed in the way the *rawprint()* function (in *print-isakmp.c*) parses certain malformed ISAKMP packets containing an invalid "len" or "loc" value.
 - ◆ A vulnerability existed in the way the *I()* function (in *print-radius.c*) parses RADIUS attributes containing overly long length values.
 - ◆ A vulnerability existed in the way **tcpdump** parses specially crafted ISAKMP packets.erg712544 fz528784
 27. **nics** – **netconfig** fails to configure network card properly in certain situations with multiple NICS.
erg712451 fz528400
 28. **xdrivers** – Provide support for ATI Radeon 7000, 7200 and 7500 Graphics adapters.
fz528394
-

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Known Problems and Workarounds in UnixWare

7.1.3 Update Pack 4

Known Problems and Workarounds

Please take note of the following problems and workarounds when installing and using the Update Pack.

- Installation: xAPIC Support
- Installation: Disabling MAC header size prediction for IBM SNA Gateways
- Installation: License Message in System Logs
- Installation: OpenSSH requires OpenSSL
- Installation: Timezone and Locale Clashes Display Warnings
- Installation: Restart Upgrade Wizard When Freeing Space
- Installation: Upgrade Wizard Exits if Space Pressed Repeatedly
- Installation: Upgrade Wizard Fails with "Incorrect media detected"
- Installation: Upgrade Wizard Mouse Failure
- Installation: Warnings About Changed Files
- Installation: Warnings in Installation Logs
- Mozilla: Japanese characters are not echoed as they are typed
- Netscape: Default Home Page
- Networking: OpenLDAP slapd Startup Script Missing
- Online Documentation: "Print Book" Problems
- OKP: Do Not Add OKP License Before Installing OKP
- Package Removal: Removing vxva Package Causes Account Manager to Fail
- PostgreSQL: Documentation Errata
- Samba: Sample smb.conf Not Provided
- Samba: Warnings When Starting smbd and smbclient
- Security: Updated Perl CGI.pm
- Squid: Documentation Errata

Installation: xAPIC Support

xAPIC support was designed for IBM x440 systems. On some platforms, such as the IBM xSeries 360 (x360), the OS detects it should use xAPIC but the platform does not properly support it. If this happens, the symptoms are device timeouts (either a disk driver or HBA) very early during the boot process. The system will display a message stating that an HBA or disk command has timed out, and the system will become unresponsive (hang). If you are using a Multi-Processing (MP) system with Pentium 4 (Xeon) processors and this occurs do the following:

1. Reset the system.
2. When the system displays the UnixWare logo during the boot sequence, interrupt the boot by pressing any key.
3. At the **boot** prompt enter:

```
USE_XAPIC=N
boot
```

The system should now boot normally.

4. Once the system is running, edit `/stand/boot` and add the following entry to the file:

USE_XAPIC=N

This will ensure that you do not need to interrupt the boot process again.

Installation: Disabling MAC header size prediction for IBM SNA Gateways

A new **dlpi** driver tuneable in `/etc/conf/pack.d/dlpi/space.c` allows the administrator to turn off MAC header size prediction, which causes problems on IBM SNA Gateway systems:

```
int mac_header_size = 0;
```

This variable can be set as follows:

0 (default)	the kernel discovers the optimal MAC header size
less than 0	disable MAC header size prediction optimization
greater than 0	use the MAC header size specified in the <code>space.c</code> file

To disable MAC header size prediction, edit `/etc/conf/pack.d/dlpi/space.c` and change the value of `mac_header_size` to `-1`. Then enter the following commands to rebuild the kernel and reboot:

```
# idbuild -M dlpi
# shutdown -i6 -g0 -y
```

The `mac_header_size` tuneable is installed with the **nics** package.
527969

Installation: License Messages in System Logs

Notices like the following may appear in `/var/adm/syslog` and `/var/adm/log/osmlog` after installation of the Update Pack:

```
Jan 30 11:47:40 systemname sco_pmd[884]: license [nnnnnnnnn/167/1.0] missing
dependent product [xxx/8.0]
```

These messages are a consequence of the license upgrade process and can be safely ignored. Enter the following commands, as **root**, to remove the offending license from the license database and refresh the Policy Manager Daemon (**sco_pmd**):

```
/etc/brand -r nnnnnnnnn
/etc/sco_pmd -r
```

Where `nnnnnnnnn` is copied from the notices in the system logs, as shown in the example above. Once the **brand** command is run as shown and **sco_pmd** is restarted, these notices will no longer be generated in the system logs.

Installation: OpenSSH requires OpenSSL

You may see the following error during installation of the OpenSSH (**openssh**) package:

Known Problems and Workarounds in UnixWare 7.1.3 Update Pack 4

```
##Executing postinstall script.
dynamic linker: /usr/sbin/sshd: could not open libcrypto.so.0.9.7
Killed
/etc/init.d/opensshd: Error 137 starting /usr/sbin/sshd...Bailing.
```

Or, you may see the following errors when running OpenSSH commands after installation:

```
dynamic linker: /usr/bin/ssh-keygen: binder error: symbol not found:
OPENSSL_add_all_algorithms_noconf; referenced from: /usr/bin/ssh-keygen

Killed
dynamic linker: /usr/bin/ssh-keygen: binder error: symbol not found:
OPENSSL_add_all_algorithms_noconf; referenced from: /usr/bin/ssh-keygen

Killed
dynamic linker: /usr/bin/ssh-keygen: binder error: symbol not found:
OPENSSL_add_all_algorithms_noconf; referenced from: /usr/bin/ssh-keygen

Killed
OpenSSL version mismatch. Built against 90703f, you have 90607f
/etc/init.d/opensshd: Error 255 starting /usr/sbin/sshd... bailing.
```

These messages indicates that the OpenSSL (**openssl**) package is either not installed, or the installed version of OpenSSL is an earlier version than the one required by OpenSSH. To fix this, install the latest **openssl** package (from the same media on which you found **openssh**) and then re-install **openssh**.

527982 528971

Installation: Restart Upgrade Wizard When Freeing Space

Although the Upgrade Wizard will display a warning about insufficient disk space when selecting packages, it may fail to automatically select all packages for update without displaying a warning. If the summary of packages automatically selected to be installed is incomplete due to insufficient disk space, use the work-around below to abort the Upgrade Wizard:

```
# ps -af | grep uli
  root  3672  2721   TS  80  0 13:23:58 pts/15    0:00 /usr/lib/uli/framework/w
izardFW /usr/lib/uli/wizard/ULIWZD
# kill -9 3672
# rm -f /tmp/uli.lck
```

The **kill** command takes as its argument the Process ID (PID) of the **uli** process returned by the **ps** command, as shown.

After terminating the **uli** process, and freeing space on your hard disk, restart the Upgrade Wizard.

Installation: Upgrade Wizard Exits if Space Pressed Repeatedly

When launching the Upgrade Wizard using the **uli** command from a desktop window, the Upgrade Wizard may exit unexpectedly if you press the space bar a few times while it is loading. To work around this, re-run the Upgrade Wizard.

527905

Installation: Upgrade Wizard Fails with "Incorrect media detected"

If you use the Upgrade Wizard (**uli**) to install, and you see the message `Incorrect media detected`, you are using the incorrect version of the Upgrade Wizard for the media you are trying to install. Exit the Upgrade Wizard, and load the **uli** package from the Update Pack media you are attempting to install, following the directions in the section Installation Procedures.

Installation: Upgrade Wizard Mouse Failure

If the Upgrade Wizard loses window focus after the Update Set is installed and it's not possible to select packages or activate window buttons using the mouse, either press the <Ctrl> key while clicking the mouse button, or re-start the window manager from the root window menu (click the right mouse button to see the menu).

Installation: Warnings About Changed Files

During installation of the Update Pack on a system that was upgraded from a release prior to Release 7.1.3, warnings such as the following may be displayed:

```
UX:pkginstall: WARNING: /etc/conf/pack.d/msr/Driver.o <shared file is volatile>
UX:pkginstall: WARNING: /etc/conf/pack.d/pcid/Driver.o <shared file is volatile>
UX:pkginstall: WARNING: /etc/conf/pack.d/ppp/Driver.o <shared file is volatile>
UX:pkginstall: WARNING: /etc/conf/pack.d/pppml/Driver.o <shared file is volatile>
...
```

The Warnings displayed on your system will depend on the originally installed release. These Warnings are expected and can be safely ignored.

527406

Installation: Warnings in Installation Logs

After installation, you may see the following messages in `/var/sadm/install/logs/uw713u4.out`:

```
UX:removef: ERROR: attribute verification of
</usr/lib/locale/de/LC_MESSAGES/ifor.cat> failed
pathname does not exist
UX:removef: ERROR: attribute verification of
</usr/lib/locale/es/LC_MESSAGES/ifor.cat> failed
pathname does not exist
UX:removef: ERROR: attribute verification of
</usr/lib/locale/fr/LC_MESSAGES/ifor.cat> failed
pathname does not exist
UX:removef: ERROR: attribute verification of
</usr/lib/locale/ja/LC_MESSAGES/ifor.cat> failed
pathname does not exist
```

You may also see the following warnings in `/var/sadm/install/logs/uw713u4.log`:

```
UX:pkginstall: WARNING: /etc/conf/mdevice.d/mps <shared file is volatile>
UX:pkginstall: WARNING: /usr/sbin/ifor_pmd <no longer a regular file>
```

These messages are expected and may be safely ignored.

528812

Mozilla: Japanese characters are not echoed as they are typed

Japanese characters are not displayed as they are typed (using the X input method, invoked by typing a "shift-space") when filling a text or dialog box. The Japanese characters are instead displayed when "Enter" is pressed. This behavior is the default setting of the **xim.input_style** attribute in the Mozilla browser.

If users desire to have characters displayed as they are typed, they need to add the following line:

```
user_pref("xim.input_style", "over-the-spot");
```

to their preferences java script file, typically *\$HOME/.mozilla/default/*/prefs.js*.

Netscape: Default Home Page

The default home page listed in the **Edit > Preferences > Navigator** window is <http://www.caldera.com>, even though the link points to The SCO Group, Inc., Web Site at <http://www.sco.com>. This is a legacy of previous releases of the system, and can be updated if desired.

Networking: OpenLDAP slapd Startup Script Missing

The startup script for the OpenLDAP **slapd** daemon is missing, so **slapd** will not start on boot. To start **slapd**, enter the following command, as **root**:

```
/usr/libexec/slapd -u root -h 'ldap:/// ldaps:///' 2>/dev/null
```

You can also create a file named */etc/rc2.d/S99slapd*, with the above contents, and **slapd** will start automatically on reboots. For further information on **slapd**, see the **slapd(8C)** manual page and the OpenLDAP documentation under **Networking** in the online documentation on <http://localhost:8458>.

Online Documentation: "Print Book" Problems

Problems have been observed with the DocView (<http://hostname:8458>) **PRINT BOOK** facility:

1. Some files do not print when selected from the **PRINT BOOK** list, or the incorrect content is printed instead. This occurs in C and non-C locales.
2. Multibyte files cannot be printed (this includes, for example, Japanese-language documentation from the **jabasedoc** package on the Localized Documentation CD in the UnixWare Media Kit) from the **PRINT BOOK** list. This is because the underlying engine in DocView for printing HTML (**HTMLDOC**) does not support multibyte files.
3. Some documents are not being printed in foreign languages when locale is properly selected and the foreign-language documentation is installed.

The workaround in all these cases is to display the files individually from the DocView **SITE MAP** interface (which is identical to the **PRINT BOOK** list), and use your browser's **Print** command to print the files.

For example, if you use the **PRINT BOOK** interface to print a *New Features* file and it does not work, click on the **SITE MAP** button on the DocView menu (<http://hostname:8458>) and select the name of the link that you wanted to print (the **SITE MAP** and **PRINT BOOK** lists are identical). Once the document is loaded into the browser, print it using your browser's **Print** command (**File > Print** in Netscape) to print to a local printer or to a file. The formats available depend on your local browser's setup.

527817

OKP: Do Not Add OKP License Before Installing OKP

If you are installing the OpenServer Kernel Personality (OKP) product on top of the Upgrade Pack, do not add the OKP License to the License Manager before beginning installation of OKP. Instead, add the license during installation of OKP, as described in the OKP Release Notes. If you do add an OKP License to the License Manager before the OKP product is installed, the License Manager may report the following when you install the license:

```
Licensing of <Unknown Product with id 181> is successfully completed
```

Thereafter, the main License Manager screen may list the OKP license incorrectly, as follows:

```
Unknown Product with id 181
```

If this occurs, you should remove the OKP license (**License > Remove** in the License Manager menu) and then add it again (**License > Add**). The License Manager will then display the license correctly.

528252

Package Removal: Removing vxva Package Causes Account Manager to Fail

Removing the **vxva** package (VERITAS ODM Visual Administrator) from the system causes the **scoadmin account** graphical account manager to fail with these messages:

```
Unable to retrieve locales
Unable to get initial list of users
```

The problem is caused by symbolic links left behind by the removal of the **vxva** package. To fix the problem, remove the links by entering the following commands (as **root**):

```
rm /usr/lib/locale/C/LC_MESSAGES/Vxva_inst
   /usr/lib/locale/C/LC_MESSAGES/Vxva_msgs
```

PostgreSQL: Documentation Errata

The PostgreSQL installation creates a **postgres** user if one does not already exist on the system. The **postgres** user is automatically configured with **root**'s password. The script */etc/init.d/postgresql* can be used to automatically start the PostgreSQL postmaster binary running as this user. The **postgres** user's password can be modified using the **passwd(1)** program.

Samba: Sample smb.conf Not Provided

The **samba** package (Samba 3.0) does not contain a sample */usr/lib/samba/lib/smb.conf*; Samba will not start without one. If you already have an earlier version of Samba installed, your existing *smb.conf* file will not be altered, and Samba should start normally. If you are installing Samba for the first time, copy the file provided in Appendix A below to */usr/lib/samba/lib/smb.conf*, and to */usr/lib/samba/lib/smb.conf.sample* as a backup copy. You can then edit *smb.conf* for your configuration.

Another alternative is to launch the Samba Web Administration Tool (SWAT) utility (`/usr/lib/samba/sbin/swat`) and use the web interface to create an initial `smb.conf`.

Note: if you use SWAT to configure Samba, SWAT overwrites `/usr/lib/samba/lib/smb.conf` with a version it creates from your specifications in the web interface. This will lose any customizations you make to a manually edited version. It is therefore important to keep a back-up copy of any manual edits you make to `smb.conf`.

Samba: Warnings When Starting `smbd` and `smbclient`

When starting `smbd` or `smbclient`, warnings like the example below are displayed: for `smbd` in `/var/adm/syslog`, and for `smbclient` to standard out.

```
[2004/02/23 10:52:17, 0] lib/charcnv.c:(134)
Conversion from UTF8 to CP850 not supported
```

These warnings can be safely ignored; both `smbd` and `smbclient` should startup after these messages are displayed.

Security: Updated Perl CGI.pm

`CGI.pm` is a Perl module (contained in the **perl5** package available from the base UnixWare media) that provides function calls for form definition. There is a vulnerability present in forms created with the `start_form()` and `start_multipart_form()` functions defined in `CGI.pm`. If the action for the form is left unspecified in a call to either function, the form action can be manipulated by a malicious user (using an appropriate URL) to launch a cross site scripting attack against the host system.

If you use the `CGI.pm` module in any Perl programs, it is recommended that you install the perl and **perlmods** packages, available on the SCO Web Services Enabling CD. The **perlmods** package contains an updated `CGI.pm` module that closes this vulnerability.

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Squid: Documentation Errata

The `squid` manual page installed by the `squid` package contains a number of errors:

- The Squid proxy server control script is located at `/etc/init.d/squid`.
- The Squid software is located under `/usr/lib/squid`.
- To start up Squid, the Domain Name Service (DNS) daemon `in.named(1M)` must already be running, and Squid must be able to reach at least one of the specified DNS servers; otherwise, it will not start. Follow this procedure to configure and begin using Squid:

1. Edit the file `/usr/lib/squid/etc/squid.conf`, and make the following changes:

1. Search for the `visible_hostname` keyword, and insert a line like the following:

```
visible_hostname nodename
```

where `nodename` is the name you want returned by the server to clients in messages.

2. Enable access for your clients. This is done with a combination of the

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`http_access` and `acl` keywords (search for `http_access` keyword; the `acl` section is just above it in the file). To simply allow all hosts to access squid, enter a single `http_access` statement:

```
http_access allow all
```

Most sites will want better security, and allow only known sites to access the proxy. The following two statements allow only hosts on the "10.0.0" subnet to access the server:

```
acl local 10.0.0.0/255.255.255.0
http_access allow local
```

Note that the ordering of `http_access` entries in the `squid.conf` file is important. You may need to put entries for local clients at the top of the list of `http_access` entries in order for them to work.

See the comments in the file `/usr/lib/squid/etc/squid.conf` as well as the Squid documentation installed along with the **squid** package, in the online documentation under Internet and Intranet, for more information on configuring Squid.

2. Enter, as root:

```
/usr/lib/squid/bin/squid -z
```

to initialize the Squid caches.

3. Start Squid:

```
/etc/init.d/squid start
```

4. On each client (including the local system), set the browser's preferences to go to the proxy server instead of connecting directly to the internet. In Netscape or Mozilla, this is done by opening the browser Preferences (**Edit > Preferences**) and selecting **Advanced > Proxies**. Select **Manual Configuration**, and click on **View**. In the following window, set at least the **http:** and **ftp:** entries to point to the nodename or IP address of the UnixWare system running the Squid proxy server; then, set the port for both entries to **3128**, the default port on which the UnixWare Squid server listens for requests. Save your changes to the browser's Preferences.

The browser will now access the internet through the Squid proxy. Check the files under `/usr/lib/squid/logs` if you encounter problems.

Appendix A: Sample Samba 3.0 smb.conf

```
# This is the main Samba configuration file. You should read the
# smb.conf(5) manual page in order to understand the options listed
# here. Samba has a huge number of configurable options (perhaps too
# many!) most of which are not shown in this example
#
# Any line which starts with a ; (semi-colon) or a # (hash)
# is a comment and is ignored. In this example we will use a #
# for commentry and a ; for parts of the config file that you
# may wish to enable
#
```

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```
# NOTE: Whenever you modify this file you should run the command "testparm"
# to check that you have not many any basic syntactic errors.
#
#=====  
[global]
# workgroup = NT-Domain-Name or Workgroup-Name
#       workgroup = MYGROUP
# server string is the equivalent of the NT Description field
#       server string = Samba Server
# This option is important for security. It allows you to restrict
# connections to machines which are on your local network. The
# following example restricts access to two C class networks and
# the "loopback" interface. For more examples of the syntax see
# the smb.conf man page
; hosts allow = 192.168.1. 192.168.2. 127.
# if you want to automatically load your printer list rather
# than setting them up individually then you'll need this
#       printcap name = lpstat
#       load printers = yes
# It should not be necessary to spell out the print system type unless
# yours is non-standard. Currently supported print systems include:
# bsd, sysv, plp, lprng, aix, hpux, qnx
#       printing = sysv
# Uncomment this if you want a guest account, you must add this to /etc/passwd
# otherwise the user "nobody" is used
; guest account = pcguest
# this tells Samba to use a separate log file for each machine
# that connects
#       log file = /usr/lib/samba/var/log.%m
# Put a capping on the size of the log files (in Kb).
#       max log size = 50
# Security mode. Most people will want user level security. See
# security_level.txt for details.
#       security = user
# Use password server option only with security = server
; password server = NT-Server-Name
# Password Level allows matching of _n_ characters of the password for
# all combinations of upper and lower case.
; password level = 8
; username level = 8
# You may wish to use password encryption. Please read
# ENCRYPTION.txt, Win95.txt and WinNT.txt in the Samba documentation.
# Do not enable this option unless you have read those documents
; encrypt passwords = yes
; smb passwd file = /etc/smbpasswd
# The following are needed to allow password changing from Windows to
# update the Linux svtsem password also.
# NOTE: Use these with 'encrypt passwords' and 'smb passwd file' above.
# NOTE2: You do NOT need these to allow workstations to change only
#       the encrypted SMB passwords. They allow the Unix password
```

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```
#         to be kept in sync with the SMB password.
; unix password sync = Yes
; passwd program = /usr/bin/passwd %u
; passwd chat = *New*UNIX*password* %n\n *ReType*new*UNIX*password* %n\n *passwd:*all*authenticat

# Unix users can map to different SMB User names
; username map = /etc/smbusers

# Using the following line enables you to customise your configuration
# on a per machine basis. The %m gets replaced with the netbios name
# of the machine that is connecting
; include = /etc/smb.conf.%m

# Most people will find that this option gives better performance.
# See speed.txt and the manual pages for details
    socket options = TCP_NODELAY SO_RCVBUF=8192 SO_SNDBUF=8192

# Configure Samba to use multiple interfaces
# If you have multiple network interfaces then you must list them
# here. See the man page for details.
; interfaces = 192.168.12.2/24 192.168.13.2/24

# Configure remote browse list synchronisation here
# request announcement to, or browse list sync from:
#     a specific host or from / to a whole subnet (see below)
; remote browse sync = 192.168.3.25 192.168.5.255
# Cause this host to announce itself to local subnets here
; remote announce = 192.168.1.255 192.168.2.44

# Browser Control Options:
# set local master to no if you don't want Samba to become a master
# browser on your network. Otherwise the normal election rules apply
; local master = no

# OS Level determines the precedence of this server in master browser
# elections. The default value should be reasonable
; os level = 33

# Domain Master specifies Samba to be the Domain Master Browser. This
# allows Samba to collate browse lists between subnets. Don't use this
# if you already have a Windows NT domain controller doing this job
; domain master = yes

# Preferred Master causes Samba to force a local browser election on startup
# and gives it a slightly higher chance of winning the election
; preferred master = yes

# Use only if you have an NT server on your network that has been
# configured at install time to be a primary domain controller.
; domain controller = NT-Domain-Controller-SMBName

# Enable this if you want Samba to be a domain logon server for
# Windows95 workstations.
; domain logons = yes

# if you enable domain logons then you may want a per-machine or
# per user logon script
# run a specific logon batch file per workstation (machine)
; logon script = %m.bat
# run a specific logon batch file per username
; logon script = %U.bat
```

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```
# Where to store roving profiles (only for Win95 and WinNT)
# %L substitutes for this servers netbios name, %U is username
# You must uncomment the [Profiles] share below
; logon path = \\%L\Profiles\%U

# All NetBIOS names must be resolved to IP Addresses
# 'Name Resolve Order' allows the named resolution mechanism to be specified
# the default order is "host lmhosts wins bcast". "host" means use the unix
# system gethostbyname() function call that will use either /etc/hosts OR
# DNS or NIS depending on the settings of /etc/host.config, /etc/nsswitch.conf
# and the /etc/resolv.conf file. "host" therefore is system configuration
# dependant. This parameter is most often of use to prevent DNS lookups
# in order to resolve NetBIOS names to IP Addresses. Use with care!
# The example below excludes use of name resolution for machines that are NOT
# on the local network segment
# - OR - are not deliberately to be known via lmhosts or via WINS.
; name resolve order = wins lmhosts bcast

# Windows Internet Name Serving Support Section:
# WINS Support - Tells the NMBD component of Samba to enable it's WINS Server
; wins support = yes

# WINS Server - Tells the NMBD components of Samba to be a WINS Client
# Note: Samba can be either a WINS Server, or a WINS Client, but NOT both
; wins server = w.x.y.z

# WINS Proxy - Tells Samba to answer name resolution queries on
# behalf of a non WINS capable client, for this to work there must be
# at least one WINS Server on the network. The default is NO.
; wins proxy = yes

# DNS Proxy - tells Samba whether or not to try to resolve NetBIOS names
# via DNS nslookups. The built-in default for versions 1.9.17 is yes,
# this has been changed in version 1.9.18 to no.
; dns proxy = no

# Case Preservation can be handy - system default is _no_
# NOTE: These can be set on a per share basis
; preserve case = no
; short preserve case = no
# Default case is normally upper case for all DOS files
; default case = lower
# Be very careful with case sensitivity - it can break things!
; case sensitive = no

##### Share Definitions #####
[homes]
; comment = Home Directories
; browseable = no
; writable = yes

# Un-comment the following and create the netlogon directory for Domain Logons
; [netlogon]
; comment = Network Logon Service
; path = /home/netlogon
; guest ok = yes
; writable = no
; share modes = no

# Un-comment the following to provide a specific roving profile share
# the default is to use the user's home directory
```

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```
:[Profiles]
;   path = /home/profiles
;   browseable = no
;   guest ok = yes

# NOTE: If you have a BSD-style print system there is no need to
# specifically define each individual printer
[printers]
    comment = All Printers
    path = /var/spool/samba
    browseable = no
# Set public = yes to allow user 'guest account' to print
    guest ok = no
    writable = no
    printable = yes

# This one is useful for people to share files
:[tmp]
;   comment = Temporary file space
;   path = /tmp
;   read only = no
;   public = yes

# A publicly accessible directory, but read only, except for people in
# the "staff" group
:[public]
;   comment = Public Stuff
;   path = /home/samba
;   public = yes
;   writable = yes
;   printable = no
;   write list = @staff

# Other examples.
#
# A private printer, usable only by fred. Spool data will be placed in fred's
# home directory. Note that fred must have write access to the spool directory,
# wherever it is.
:[fredsprn]
;   comment = Fred's Printer
;   valid users = fred
;   path = /homes/fred
;   printer = freds_printer
;   public = no
;   writable = no
;   printable = yes

# A private directory, usable only by fred. Note that fred requires write
# access to the directory.
:[fredsdir]
;   comment = Fred's Service
;   path = /usr/somewhere/private
;   valid users = fred
;   public = no
;   writable = yes
;   printable = no

# a service which has a different directory for each machine that connects
# this allows you to tailor configurations to incoming machines. You could
# also use the %u option to tailor it by user name.
# The %m gets replaced with the machine name that is connecting.
```

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```
:[pchome]
; comment = PC Directories
; path = /usr/pc/%m
; public = no
; writable = yes

# A publicly accessible directory, read/write to all users. Note that all files
# created in the directory by users will be owned by the default user, so
# any user with access can delete any other user's files. Obviously this
# directory must be writable by the default user. Another user could of course
# be specified, in which case all files would be owned by that user instead.
:[public]
; path = /usr/somewhere/else/public
; public = yes
; only guest = yes
; writable = yes
; printable = no

# The following two entries demonstrate how to share a directory so that two
# users can place files there that will be owned by the specific users. In this
# setup, the directory should be writable by both users and should have the
# sticky bit set on it to prevent abuse. Obviously this could be extended to
# as many users as required.
:[myshare]
; comment = Mary's and Fred's stuff
; path = /usr/somewhere/shared
; valid users = mary fred
; public = no
; writable = yes
; printable = no
; create mask = 0765
```

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UnixWare 7.1.4 New Features

UnixWare 7.1.4 New Features

Features in the Update Set:

- Compatibility: New Tunable Parameters for 16-bit IPC
- Desktop Login: Default Desktop
- DocView Enhancements
- Emergency Recovery CD Support
- Emergency Recovery Master Boot Record Option
- Filesystems: SCOAdmin Filesystem Manager Moved
- Graphics: VESA BIOS Initialization of Newer Video Cards
- Hardware: ACPI Boot Support
- Hardware: Uniprocessor Hyperthreading Support
- Hardware: PCI Serial Support
- Hardware: Enhanced Hyperthreading Support
- Internationalization: India Time Zone Listed
- Licensing: Enhancements and Fixes
- Licensing: Memory and CPU Limits
- Mail and Messaging: Updated Sendmail
- Message Catalog Format
- Networking: dlpid Performance Enhancements
- Networking: DNS Manager Enhancements
- Networking: Additional DNS Manager Enhancements
- Networking: Network Time Protocol (NTP) v4
- Networking: IPsec (VPN Support)
- PPP Enhancements
- Performance: Swap Space Limit Extended to 4GB
- Printing PostScript Files on PCL Printers
- Printing: Increased Number of Print Jobs
- Security: Core Dump for setuid Processes
- Security: Name Service Switch (NSS)
- Shells: Updated ksh
- Storage Management: Disk, Partition, and Slice Managers
- System Management: Upgrade to Unixware 7.1.4
- UNIX95 Conformance

Features in Other Packages:

- Audio: Support for Intel On-Board Sound Chips
- Compatibility: OpenServer Kernel Personality (OKP)
- Database: Berkeley DB Toolkit 4.1.25 for OpenLDAP
- Database: PostgreSQL 7.4.2
- Hardware: Host Bus Adapter (HBA) Drivers
- Hardware: Host Bus Adapter (HBA) Drivers
- Hardware: Host Bus Adapter (HBA) Drivers
- Hardware: Network Interface Card (NIC) Drivers
- Hardware: Network Interface Card (NIC) Drivers
- Hardware: Network Interface Card (NIC) Drivers
- Hardware: Video Card Drivers

UnixWare 7.1.4 New Features

Hardware: Video Card Drivers
Hardware: Updated Drivers
Internet and Intranet: Java Communications API for Java Serial I/O Support (javax.comm)
Internet and Intranet: Java 2 Standard Edition 1.3.1_10
Internet and Intranet: Java 2 Standard Edition 1.4.2_03
Internet and Intranet: Mozilla 1.2.1b
Networking: OpenLDAP 2.2.4
Networking: tcpdump Enhancements
Networking and Security: OpenSSH and OpenSSL
Online Documentation: Updated Topics and Manual Pages
Online Documentation: Updated Topics and Manual Pages
Printing: CUPS (Common UNIX Print System)
Printing: Foomatic Filter and PPD Files
Printing: gimpprint Driver v4.2.5
Printing: Hewlett-Packard InkJet Driver hpijs v1.5
Printing: USB Support
Printing: USB Printing Enhancements
Programming: JPEG (image compression) Library
Programming: PNG Library
Programming: TIFF Image Library and Utilities
SCOx: Client API and Web Services Support
Security: Padding of Short Ethernet Frames
Security: zlib 1.2.1 Data Compression Library
Upgrade: Upgrade Wizard Enhancements
Windows Interoperability: Samba 3

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SCOx® Software Installation and Release Notes

Table of Contents

1. Release Notes
2. Contents of the CDROM
3. Installing the Web Services Components

1. Release Notes

The SCOx packages on SCO Operating Systems are divided into several parts:

1. Support Components for Web Services (Set)
2. Web Services Toolkits (Set)
3. Apache 2.0 Web Server (Package)
4. Perl 5.8.0 (Package)
5. SOAP and XML for Perl (Package)
6. Additional Modules for Perl (Package)
7. mod_perl for Apache (Package)

The Support Components include web servers like Apache and tomcat, C/C++ compilers, the PHP interpreter, the Java Runtime Environment, Database Servers like MySQL/Postgres, XML parsers like expat and libxml2, basic SSL Toolkits, and various other utilities.

The Web Services Toolkits provide libraries, etc to develop SOAP based applications. Currently, the toolkits are provided for SOAP Programming in C/C++, Java, and PHP.

The Perl 5.8.0, Additional Modules for Perl, mod_perl for Apache, and SOAP packages provide the base and toolkit for the ability to develop SOAP based applications in Perl.

The Apache 2.0 Web Server is provided as an optional web server. Two different 'httpd' binaries are shipped in the package, based on two different MPMs (multi-processing modules): "worker" and "prefork". The apache2 package doesn't automatically replace the old Apache 1.3 Web Server; Administrators have to manually migrate data and configuration files from Apache 1.3. mod_perl 2.0 (version 1.99_09) is in a separate package (modperl.pkg).

2. Contents of the CDROM

The SCOx packages require UnixWare Release 7.1.3 with Update Pack 3 installed. The SCOx packages for this UnixWare release are:

These packages are contained within the scox-enb set (scox-enb.image):

Name	Version	Description
-----	-----	-----
apache	1.3.26	Apache Web Server [more info]
curl	7.10.3-1	Provides library to support SSL in PHP [more info]
expat	1.95.1	SAX type XML parser in C/C++
gzip	1.2.4	GNU file compression utilities

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j2jre131	1.3.1.08a	J2SE Runtime Environment 1.3.1
javajsse	1.0.3-2	Sun Java Secure Socket Extension [more info]
libxml2	2.4.26	DOM type XML parser in C/C++
mysql	3.23.49	MySQL - SQL database server
openssl	0.9.6g	OpenSSL - Secure Sockets Toolkit
php	4.3.1-2	PHP 4.3.1 + HTTP-Request + Mail_Mime + Net-DIME + Net-URL [more info]
tomcat	4.1.17-1	Apache Tomcat App Server for Java servlets, JSP, web services
unzip	5.50	Uncompression tool for ZIP format files
urwfonts	2.0	(URW)++ Free X11 Fonts
wget	1.5.3	Command-line url retriever utility
zlib	1.1.4	Data-compression library

These packages are contained within the scox-uw set (scox-uw.image):

gsoap	2.2.3-2	SOAP Toolkit for C/C++. The SCOx gsoap package supports the following compilers on UnixWare Systems: [more info]
javasoa	0.11-1	SOAP Toolkit for Java [more info]
pearsoa	0.7.3-1	SOAP Toolkit for PHP [more info]

These packages are contained by themselves on the CD:

apache2	2.0.47	Apache Web Server [more info]
perl	5.8.0	Perl 5.8.0 + XML::Parser + Crypt::SSLeay + IO-Socket-SSL + Compress-Zlib [more info]
soaplite	0.55-2	SOAP and XML for Perl [more info]
perlmods	5.8.0	Additional Modules for Perl
modperl	1.99_09	mod_perl for Apache
php4	4.3.4	PHP: Hypertext Preprocessor for Apache 2 [more info]
modjk2	2.0.2	mod_jk2 for Apache 2

3. Installing the Web Services Components

Before You Install

Read these notes **before** you begin the installation of the SCOx CD:

- If you have determined that your development project requires that the "UnixWare and OpenServer Development Kit" (UODK) be installed on your system, install it before you begin installing the SCOx software.
- The install script installs the scox-enb set, which requires at least 82 MB of disk space free in the /tmp directory. It will fail if there is less space than that. If this is the case, you will need to increase the size of /tmp, or create a directory in a filesystem having the required 82 MB of free space, and then create an executable file /tmp/tmpdir (chmod +x /tmp/tmpdir) which contains the single line 'TMPDIR=/new_directory', where /new_directory is the directory with the 82 MB of free space.

Install

You can install the SCOx packages either from CD or from iso image.

To install from CD:

SCOx® Software Installation and Release Notes

1) As root, insert the CD in the CDROM drive and issue these commands:

```
# mount /dev/cdrom/cdrom1 /installr  
# /installr/install
```

2) When the installation is complete, execute the following command:

```
# umount /installr
```

and remove the SCOx CD.

To install from iso image:

1) Download the SCOx iso image from:

<http://www.sco.com/support/update/download/uw713up.html>

and save it in /tmp

2) As root, issue the following commands:

```
# marry -a /tmp/uw713scoxCDimage.iso  
# mount -r /dev/marry/tmp/uw713scoxCDimage.iso /installr  
# /installr/install
```

3) When the installation is complete, issue the following commands:

```
# umount /installr  
# marry -d /dev/marry/tmp/uw713scoxCDimage.iso
```

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