

```

*****
11468 Sat Sep 14 18:48:47 2013
new/usr/src/cmd/Makefile
4135 integrate lockf utility
*****
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28 include ../Makefile.master

30 #
31 # Note that the commands 'agents', 'lp', 'perl', and 'man' are first in
32 # the list, violating alphabetical order. This is because they are very
33 # long-running and should be given the most wall-clock time for a
34 # parallel build.
35 #
36 # Commands in the FIRST_SUBDIRS list are built before starting the build
37 # of other commands. Currently this includes only 'isaexec' and
38 # 'platexec'. This is necessary because $(ROOT)/usr/lib/isaexec or
39 # $(ROOT)/usr/lib/platexec must exist when some other commands are built
40 # because their 'make install' creates a hard link to one of them.
41 #
42 # Commands are listed one per line so that TeamWare can auto-merge most
43 # changes.
44 #

46 FIRST_SUBDIRS= \
47 isaexec \
48 platexec

50 COMMON_SUBDIRS= \
51 allocate \
52 availdevs \
53 lp \
54 perl \
55 man \
56 Adm \
57 abi \
58 adbgen \
59 acct \
60 acctadm \
61 arch

```

```

62 asa \
63 ast \
64 audio \
65 auths \
66 autopush \
67 avs \
68 awk \
69 awk_xpg4 \
70 backup \
71 banner \
72 bart \
73 basename \
74 bc \
75 bdiff \
76 beadm \
77 bfs \
78 bnu \
79 boot \
80 busstat \
81 cal \
82 calendar \
83 captinfo \
84 cat \
85 cdrw \
86 cfgadm \
87 checkeq \
88 checknr \
89 chgrp \
90 chmod \
91 chown \
92 chroot \
93 clear \
94 clinfo \
95 cmd-crypto \
96 cmd-inet \
97 col \
98 compress \
99 consadm \
100 coreadm \
101 cpio \
102 cpc \
103 cron \
104 crypt \
105 csh \
106 csplit \
107 ctrun \
108 ctstat \
109 ctwatch \
110 datadm \
111 date \
112 dc \
113 dd \
114 deroff \
115 devfsadm \
116 syseventd \
117 devctl \
118 devinfo \
119 devmgmt \
120 devprop \
121 dfs.cmds \
122 diff \
123 diff3 \
124 diffmk \
125 dircmp \
126 dirname \
127 dis \

```

## new/usr/src/cmd/Makefile

```

128      diskmgtd  \
129      dispadmin \
130      dladm    \
131      dlstat   \
132      dmesg    \
133      dodatadm \
134      dtrace   \
135      du       \
136      dumpadm  \
137      dumpcs   \
138      echo     \
139      ed       \
140      eeprom   \
141      egrep    \
142      eject    \
143      emul64ioctl \
144      enhance  \
145      env      \
146      eqn      \
147      expand    \
148      expr     \
149      exstr    \
150      factor   \
151      false    \
152      fcinfo   \
153      fcoesvc  \
154      fdetach  \
155      fdformat \
156      fdisk    \
157      filesync \
158      fgrep    \
159      file     \
160      filebench \
161      find     \
162      flowadm  \
163      flowstat \
164      fm       \
165      fmt      \
166      ffmt      \
167      ffmtmsg  \
168      fold     \
169      format   \
170      fs.d     \
171      fstyp    \
172      fuser    \
173      fwflash  \
174      gcore    \
175      gencat   \
176      geniconvtbl \
177      genmsg   \
178      getconf  \
179      getdevpolicy \
180      getent   \
181      getfacl \
182      getmajor \
183      getopt  \
184      gettext  \
185      gettxt   \
186      grep     \
187      grep_xpg4 \
188      groups   \
189      grpck    \
190      gss      \
191      hal      \
192      halt     \
193      head     \

```

3

## new/usr/src/cmd/Makefile

```

194      hostid   \
195      hostname \
196      hotplug  \
197      hotplugd \
198      hwdata   \
199      ibd_upgrade \
200      id       \
201      idmap    \
202      infocmp  \
203      init     \
204      initpkg  \
205      install.d \
206      intrd   \
207      intrstat \
208      ipcrm   \
209      ipcs    \
210      ipf     \
211      isainfo \
212      isalist \
213      itutools \
214      iscsiadm \
215      iscsid  \
216      iscsitsvc \
217      isns    \
218      itadm   \
219      java    \
220      kbd     \
221      keyserv \
222      killall \
223      krb5    \
224      ksh     \
225      kvmstat \
226      last    \
227      lastcomm \
228      latencytop \
229      ldap    \
230      ldapcachemgr \
231      lgrpinfo \
232      line    \
233      link    \
234      lockf   \
235      #endif /* ! codereview */ \
236      dlmgtd  \
237      listen  \
238      loadkeys \
239      locale  \
240      localedef \
241      lockstat \
242      locator \
243      lofiadm  \
244      logadm  \
245      logger  \
246      login   \
247      logins  \
248      look    \
249      ls      \
250      luxadm  \
251      lvm     \
252      mach    \
253      machid  \
254      mail    \
255      mailx   \
256      makekey \
257      mdb     \
258      msg     \
259      mkdir   \

```

4

```

260 mkfifo \
261 mkfile \
262 mkmsgs \
263 mknod \
264 mkpwdict \
265 mktemp \
266 modload \
267 more \
268 mpathadm \
269 msgfmt \
270 msgid \
271 mt \
272 mv \
273 mvdir \
274 ndmpadm \
275 ndmpd \
276 ndmpstat \
277 netadm \
278 netfiles \
279 newform \
280 newgrp \
281 news \
282 newtask \
283 nice \
284 nl \
285 nlsadmin \
286 nohup \
287 nsadmin \
288 nscd \
289 oamuser \
290 oawk \
291 od \
292 pack \
293 pagesize \
294 passgmt \
295 passwd \
296 pathchk \
297 pbind \
298 pcidr \
299 pcitool \
300 pfexec \
301 pfexecd \
302 pginfo \
303 pgstat \
304 pgrep \
305 picl \
306 plimit \
307 policykit \
308 pools \
309 power \
310 powertop \
311 ppgsz \
312 pg \
313 plockstat \
314 pr \
315 prctl \
316 print \
317 printf \
318 priocntl \
319 profiles \
320 projadd \
321 projects \
322 prstat \
323 prtconf \
324 prtdiag \
325 prtvtoc \

```

```

326 ps \
327 psradm \
328 psrinfo \
329 psrset \
330 ptools \
331 pwck \
332 pwconv \
333 pwd \
334 pyzfs \
335 raidctl \
336 ramdiskadm \
337 rcap \
338 rcm_daemon \
339 rctladm \
340 refer \
341 regcmp \
342 renice \
343 rexd \
344 rm \
345 rmdir \
346 rmformat \
347 rmmount \
348 rmt \
349 rmvolmgr \
350 roles \
351 rpcbind \
352 rpcgen \
353 rpcinfo \
354 rpcsvc \
355 runat \
356 sa \
357 saf \
358 sasinfo \
359 savecore \
360 sbdadm \
361 script \
362 scsi \
363 sdiff \
364 sdpadm \
365 sed \
366 sendmail \
367 setfacl \
368 setmnt \
369 setpgrp \
370 setuname \
371 sgs \
372 sh \
373 shcomp \
374 sbios \
375 smbstrv \
376 smserverd \
377 soelim \
378 sort \
379 spell \
380 split \
381 sqlite \
382 srchtxt \
383 srptadm \
384 srptsvc \
385 ssh \
386 stat \
387 stmfadm \
388 stmfproxy \
389 stmfsvc \
390 stmsboot \
391 streams \

```

```

392 strings \
393 su \
394 sulogin \
395 sunpc \
396 svc \
397 svr4pkg \
398 swap \
399 sync \
400 sysdef \
401 syseventadm \
402 syslogd \
403 tabs \
404 tail \
405 tar \
406 tbl \
407 tcopy \
408 tcpd \
409 terminfo \
410 th_tools \
411 tic \
412 time \
413 tip \
414 tnf \
415 touch \
416 tput \
417 tr \
418 trapstat \
419 troff \
420 true \
421 truss \
422 tsol \
423 tty \
424 ttymon \
425 tzreload \
426 uadmin \
427 ul \
428 uname \
429 units \
430 unlink \
431 unpack \
432 userattr \
433 users \
434 utmp_update \
435 utmpd \
436 valtools \
437 vgrind \
438 vi \
439 volcheck \
440 volrmount \
441 vrrpadm \
442 vscan \
443 vt \
444 w \
445 wall \
446 which \
447 who \
448 whodo \
449 wracct \
450 write \
451 wusbadm \
452 xargs \
453 xstr \
454 yes \
455 ypcmd \
456 yppasswd \
457 zdb \

```

```

458 zdump \
459 zfs \
460 zhack \
461 zic \
462 zinject \
463 zlogin \
464 zoneadm \
465 zoneadmd \
466 zonecfg \
467 zonename \
468 zpool \
469 zlook \
470 zonestat \
471 zstreamdump \
472 ztest \

474 $(CLOSED_BUILD)COMMON_SUBDIRS += \
475 $(CLOSED)/cmd/iconv \
476 $(CLOSED)/cmd/ksh \
477 $(CLOSED)/cmd/localedef \
478 $(CLOSED)/cmd/more_xpg4 \
479 $(CLOSED)/cmd/mtst \
480 $(CLOSED)/cmd/od \
481 $(CLOSED)/cmd/patch \
482 $(CLOSED)/cmd/pax \
483 $(CLOSED)/cmd/printf \
484 $(CLOSED)/cmd/sed \
485 $(CLOSED)/cmd/sed_xpg4 \

487 i386_SUBDIRS= \
488 acpihpd \
489 addbadsec \
490 biosdev \
491 diskscan \
492 lms \
493 ntfsprogs \
494 parted \
495 rtc \
496 ucodeadm \
497 xvm \

499 sparc_SUBDIRS= \
500 cvcd \
501 dcs \
502 device_remap \
503 drd \
504 fruadm \
505 ldmad \
506 oplhpd \
507 prtdscp \
508 prtfru \
509 scadm \
510 sckmd \
511 sf880drd \
512 virtinfo \
513 vntsd \

515 #
516 # Commands that are messaged. Note that 'lp' and 'man' come first
517 # (see previous comment about 'lp' and 'man').
518 #
519 MSGSUBDIRS= \
520 lp \
521 man \
522 abi \
523 acctadm \

```

```

524 allocate \
525 asa \
526 audio \
527 audit \
528 auditconfig \
529 auditd \
530 auditrecord \
531 auditset \
532 auths \
533 autopush \
534 avs \
535 awk \
536 awk_xpg4 \
537 backup \
538 banner \
539 bart \
540 basename \
541 beadm \
542 bnu \
543 busstat \
544 cal \
545 cat \
546 cdrw \
547 cfgadm \
548 checkeq \
549 checknr \
550 chgrp \
551 chmod \
552 chown \
553 cmd-crypto \
554 cmd-inet \
555 col \
556 compress \
557 consadm \
558 coreadm \
559 cpio \
560 cpc \
561 cron \
562 csh \
563 csplit \
564 ctrun \
565 ctstat \
566 ctwatch \
567 datadm \
568 date \
569 dc \
570 dcs \
571 dd \
572 deroff \
573 devfsadm \
574 dfs_cmds \
575 diff \
576 diffmk \
577 dladm \
578 dlstat \
579 du \
580 dumpcs \
581 ed \
582 eject \
583 env \
584 eqn \
585 expand \
586 expr \
587 fcinfo \
588 fgrep \
589 file \

```

```

590 filesync \
591 find \
592 flowadm \
593 flowstat \
594 fm \
595 fold \
596 fs.d \
597 fwflash \
598 geniconvtbl \
599 genmsg \
600 getconf \
601 getent \
602 gettext \
603 gettxt \
604 grep \
605 grep_xpg4 \
606 grpck \
607 gss \
608 halt \
609 head \
610 hostname \
611 hotplug \
612 id \
613 idmap \
614 isaexec \
615 iscsiadm \
616 iscsid \
617 isns \
618 itadm \
619 kbd \
620 krb5 \
621 ksh \
622 last \
623 ldap \
624 ldapcachemgr \
625 lgrpinfo \
626 locale \
627 lofiadm \
628 logadm \
629 logger \
630 logins \
631 ls \
632 luxadm \
633 lvm \
634 mailx \
635 mesg \
636 mkdir \
637 mkpdict \
638 mktemp \
639 more \
640 mpathadm \
641 msgfmt \
642 mv \
643 ndmpadm \
644 ndmpstat \
645 newgrp \
646 newtask \
647 nice \
648 nohup \
649 oawk \
650 pack \
651 passwd \
652 passmgmt \
653 pathchk \
654 pfexec \
655 pg \

```

```

656     pgrep      \
657     picl      \
658     pools    \
659     power     \
660     pr        \
661     praudit   \
662     print     \
663     profiles  \
664     projadd   \
665     projects  \
666     prstat    \
667     prtdiag   \
668     ps        \
669     psrinfo   \
670     ptools    \
671     pwconv    \
672     pwd       \
673     pyzfs     \
674     raidctl   \
675     ramdiskadm \
676     rcap      \
677     rcm_daemon \
678     refer     \
679     regcmp    \
680     renice    \
681     roles     \
682     rm        \
683     rmdir     \
684     rmformat  \
685     rmmount   \
686     rmvolmgr  \
687     sasinfo   \
688     sbdadm    \
689     scadm     \
690     script    \
691     scsi      \
692     sdiff     \
693     sdpadm    \
694     sgs       \
695     sh        \
696     shcomp    \
697     smbstrv   \
698     sort      \
699     split     \
700     srptadm   \
701     ssh       \
702     stat      \
703     stmfadm   \
704     stmsboot  \
705     strings   \
706     su        \
707     svc       \
708     svr4pkg   \
709     swap      \
710     syseventadm \
711     syseventd \
712     tabs      \
713     tar       \
714     tbl       \
715     time      \
716     tnf       \
717     touch     \
718     tput      \
719     troff     \
720     tsol      \
721     tty       \

```

```

722     ttymon    \
723     tzreload  \
724     ul        \
725     uname     \
726     units    \
727     unlink   \
728     unpack   \
729     userattr  \
730     valtools  \
731     vgrind   \
732     vi        \
733     volcheck  \
734     volrmount \
735     vrrpadm   \
736     vscan    \
737     w         \
738     who       \
739     whodo    \
740     wracct   \
741     write     \
742     wusbadm  \
743     xargs     \
744     yppasswd  \
745     zdump    \
746     zfs       \
747     zic       \
748     zlogin   \
749     zoneadm  \
750     zoneadm  \
751     zonecfg  \
752     zonename \
753     zpool    \
754     zonestat

756 $(CLOSED_BUILD)MSGSUBDIRS += \
757     $(CLOSED)/cmd/iconv \
758     $(CLOSED)/cmd/ksh \
759     $(CLOSED)/cmd/localedef \
760     $(CLOSED)/cmd/more_xpg4 \
761     $(CLOSED)/cmd/od \
762     $(CLOSED)/cmd/patch \
763     $(CLOSED)/cmd/pax \
764     $(CLOSED)/cmd/printf \
765     $(CLOSED)/cmd/sed \
766     $(CLOSED)/cmd/sed_xpg4

768 sparc_MSGSUBDIRS= \
769     fruadm \
770     prtdscp \
771     prtfru \
772     virtinfo \
773     vntsd

775 i386_MSGSUBDIRS= \
776     ucodeadm

778 #
779 # commands that use dcgettext for localized time, LC_TIME
780 #
781 DCSUBDIRS= \
782     cal \
783     cfgadm \
784     diff \
785     ls \
786     pr \
787     ps \

```

```

788     tar      \
789     w        \
790     who      \
791     whodo    \
792     write

794 $(CLOSED_BUILD)DCSUBDIRS += \
795     $(CLOSED)/cmd/pax

797 #
798 # commands that belong only to audit.
799 #
800 AUDITSUBDIRS= \
801     amt      \
802     audit    \
803     audit_warn \
804     auditconfig \
805     audited  \
806     auditrecord \
807     auditreduce \
808     auditset  \
809     auditstat \
810     praudit

812 #
813 # commands not owned by the systems group
814 #
815 BWOSDIRS=

818 all :=          TARGET = all
819 install :=      TARGET = install
820 clean :=       TARGET = clean
821 clobber :=     TARGET = clobber
822 lint :=        TARGET = lint
823 _msg :=        TARGET = _msg
824 _dc :=         TARGET = _dc

826 .KEEP_STATE:

828 SUBDIRS = $(COMMON_SUBDIRS) $( $(MACH)_SUBDIRS )

830 .PARALLEL:      $(BWOSDIRS) $(SUBDIRS) $(MSGSUBDIRS) $(AUDITSUBDIRS)

832 all install clean clobber lint: $(FIRST_SUBDIRS) .WAIT $(SUBDIRS) \
833     $(AUDITSUBDIRS)

835 #
836 # Manifests cannot be checked in parallel, because we are using
837 # the global repository that is in $(SRC)/cmd/svc/seed/global.db.
838 # For this reason, to avoid .PARALLEL and .NO_PARALLEL conflicts,
839 # we spawn off a sub-make to perform the non-parallel 'make check'
840 #
841 check:
842     $(MAKE) -f Makefile.check check

844 #
845 # The .WAIT directive works around an apparent bug in parallel make.
846 # Evidently make was getting the target _msg vs. _dc confused under
847 # some level of parallelization, causing some of the _dc objects
848 # not to be built.
849 #
850 _msg: $(MSGSUBDIRS) $( $(MACH)_MSGSUBDIRS ) .WAIT _dc

852 _dc: $(DCSUBDIRS)

```

```

854 #
855 # Dependencies
856 #
857 fs.d: fstyp
858 ksh:    shcomp isaexec
859 mdb:    terminfo
860 print:  lp

862 $(FIRST_SUBDIRS) $(BWOSDIRS) $(SUBDIRS) $(AUDITSUBDIRS): FRC
863     @if [ -f $@/Makefile ]; then \
864         cd $@; pwd; $(MAKE) $(TARGET); \
865     else \
866         true; \
867     fi

869 FRC:

```

new/usr/src/cmd/lockf/Makefile

1

\*\*\*\*\*

1045 Sat Sep 14 18:48:47 2013

new/usr/src/cmd/lockf/Makefile

4135 integrate lockf utility

\*\*\*\*\*

```
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17 # information: Portions Copyright [yyyy] [name of copyright owner]
18 #
19 # CDDL HEADER END
20 #
21 #
22 # Copyright 2007 Sun Microsystems, Inc. All rights reserved.
23 # Use is subject to license terms.
24 #

26 PROG=          lockf

28 include ../Makefile.cmd

30 .KEEP_STATE:

32 all: $(PROG)

34 install: all $(ROOTPROG)

36 clean:

38 lint:  lint_PROG

40 include ../Makefile.targ
41 #endif /* !codereview */
```



```
*****
6148 Sat Sep 14 18:48:47 2013
new/usr/src/cmd/lockf/lockf.c
4135 integrate lockf utility
*****
```

```
1 /*
2  * Copyright (C) 2008 Paul Armstrong. All rights reserved.
3  *
4  * Redistribution and use in source and binary forms, with or without
5  * modification, are permitted provided that the following conditions
6  * are met:
7  * 1. Redistributions of source code must retain the above copyright
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21 * LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
22 * OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
23 * SUCH DAMAGE.
24 */

26 #include <ctype.h>
27 #include <err.h>
28 #include <errno.h>
29 #include <limits.h>
30 #include <locale.h>
31 #include <fcntl.h>
32 #include <signal.h>
33 #include <stdio.h>
34 #include <stdlib.h>
35 #include <sys/types.h>
36 #include <sys/stat.h>
37 #include <unistd.h>
38 #include <wait.h>

40 #define SLEEP_TIME 1 /* Sleep time between parent checks */

42 #if !defined(TEXT_DOMAIN)
43 #define TEXT_DOMAIN "SYS_TEST"
44 #endif

46 /* globals for use in signal handlers */
47 int pid = 0;
48 boolean_t lock_existed = B_FALSE;
49 char *file_name = NULL;

51 static void
52 usage(void)
53 {
54     (void) fprintf(stderr,
55         gettext("Usage: lockf -l|-t|-w -f /path/to/lock | -u pid\n"));
56     exit(EXIT_FAILURE);
57 }

59 /*ARGSUSED*/
60 static void
61 print_pid(int signal_number)
```

```
62 {
63     (void) printf("%d\n", pid);
64     exit(EXIT_SUCCESS);
65 }

67 /*ARGSUSED*/
68 static void
69 cleanup(int signal_handler)
70 {
71     if (!lock_existed) {
72         if (-1 == unlink(file_name))
73             perror(file_name);
74     }
75     exit(EXIT_SUCCESS);
76 }

78 int
79 main(int argc, char **argv)
80 {
81     boolean_t arg_err = B_FALSE;
82     boolean_t lock = B_FALSE, test = B_FALSE;
83     boolean_t unlock = B_FALSE, wait_lock = B_FALSE;
84     extern char *optarg;
85     extern int optind;
86     int calling_pid;
87     int child_status;
88     int filedes;
89     int flag;
90     int return_code;
91     mode_t mode = S_IRUSR | S_IWUSR;
92     struct stat *statbuf;

94     (void) setlocale(LC_ALL, "");
95     (void) textdomain(TEXT_DOMAIN);

97     while ((flag = getopt(argc, argv, "f:ltu:w")) != -1) {
98         switch (flag) {
99             case 'f':
100                 file_name = optarg;
101                 break;
102             case 'l':
103                 if (unlock || wait_lock || test)
104                     arg_err = B_TRUE;
105                 lock = B_TRUE;
106                 break;
107             case 't':
108                 if (unlock || lock)
109                     arg_err = B_TRUE;
110                 test = B_TRUE;
111                 break;
112             case 'u':
113                 if (lock || test)
114                     arg_err = B_TRUE;
115                 unlock = B_TRUE;
116                 pid = atoi(optarg);
117                 break;
118             case 'w':
119                 if (unlock || lock || test)
120                     arg_err = B_TRUE;
121                 wait_lock = B_TRUE;
122                 lock = B_TRUE;
123                 break;
124             default:
125                 usage();
126         }
127     }
```

```

129     if (1 == argc)
130         usage();

132     argc -= optind;
133     argv -= optind;

135     if (1 <= argc)
136         usage();

138     if (arg_err) {
139         (void) fprintf(stderr,
140             gettext("Use only one of -l, -t, -u or -w\n"));
141         usage();
142     }

144     if ((lock || test) && (NULL == file_name)) {
145         (void) fprintf(stderr,
146             gettext("-l, -t and -w require -f\n"));
147         usage();
148     }
149     if (unlock && pid <= 0) {
150         (void) fprintf(stderr,
151             gettext("-u requires a valid PID\n"));
152         usage();
153     }

155     if (unlock) {
156         if (-1 == kill(pid, SIGINT)) {
157             perror("kill");
158             return (EXIT_FAILURE);
159         } else {
160             return (EXIT_SUCCESS);
161         }
162     }

164     /* Make test cheap, do it before the fork and return immediately */
165     if (test) {
166         statbuf = malloc(sizeof (struct stat));
167         if (NULL == statbuf) {
168             perror("malloc");
169             exit(EXIT_FAILURE);
170         }
171         if (stat(file_name, statbuf) == -1) {
172             switch (errno) {
173                 case ENOENT:
174                     exit(EXIT_SUCCESS);
175                     /*NOTREACHED*/
176                 case EACCES:
177                     err(EXIT_FAILURE,
178                         gettext("Bad permissions on lockfile"));
179                     /*NOTREACHED*/
180                 case ENAMETOOLONG:
181                     err(EXIT_FAILURE, "lockfile name too long");
182             }
183         }
184         if ((filedes = open(file_name, O_WRONLY, mode)) == -1) {
185             perror(file_name);
186             return (EXIT_FAILURE);
187         }
188         return_code = lockf(filedes, F_TEST, 0);
189         if (return_code < 0)
190             return (EXIT_FAILURE);
191         return (EXIT_SUCCESS);
192     }

```

```

194     calling_pid = getppid();
195     if (1 == calling_pid)
196         err(EXIT_FAILURE, "Calling process seems to have died early");

198     if ((pid = fork()) < 0) {
199         perror("fork");
200         return (EXIT_FAILURE);
201     }

203     if (pid != 0) {
204         (void) signal(SIGUSR1, print_pid);
205
206         if (waitpid(pid, &child_status, 0) != pid) {
207             perror("waitpid");
208             exit(EXIT_FAILURE);
209         }

211         return (EXIT_FAILURE);
212     } else {

214         (void) close(STDIN_FILENO);
215         (void) close(STDOUT_FILENO);

217         return_code = chdir("/");
218         if (return_code < 0) {
219             perror("chdir");
220             return (EXIT_FAILURE);
221         }

223         /* Other users shouldn't be trying to write to our lock file */
224         (void) umask(077);

226         /*
227          * Note if the file existed beforehand so we can avoid deleting
228          * it when we clean up
229          */
230         if ((filedes =
231             open(file_name, O_WRONLY | O_CREAT | O_EXCL, mode)) == -1) {

233             lock_existed = B_TRUE;

235             if ((filedes =
236                 open(file_name, O_WRONLY | O_CREAT, mode)) == -1) {
237                 perror(file_name);
238                 exit(EXIT_FAILURE);
239             }
240         }

242         (void) signal(SIGINT, cleanup);
243         (void) signal(SIGQUIT, cleanup);
244         (void) signal(SIGABRT, cleanup);
245         (void) signal(SIGTERM, cleanup);

247         if (wait_lock) {
248             return_code = lockf(filedes, F_LOCK, 0);
249         } else {
250             return_code = lockf(filedes, F_TLOCK, 0);
251         }

253         if (return_code < 0)
254             return (EXIT_FAILURE);

256         /* Once we have a lock (or not), then kill the parent */
257         if (-1 == kill(getppid(), SIGUSR1)) {
258             perror("kill");
259             return (EXIT_FAILURE);

```

```
260     }
262     while (calling_pid) {
263         (void) sleep(SLEEP_TIME);
264         if (-1 == kill(calling_pid, 0))
265             calling_pid = 0;
266     }
268     cleanup(NULL);
270     return (EXIT_SUCCESS);
271 }
272 }
273 #endif /* ! codereview */
```

```

*****
3635 Sat Sep 14 18:48:47 2013
new/usr/src/cmd/lockf/unittest_lockf
4135 integrate lockf utility
*****
1 #!/bin/bash
2 #
3 # Copyright (C) 2008 Paul Armstrong. All rights reserved.
4 #
5 # Redistribution and use in source and binary forms, with or without
6 # modification, are permitted provided that the following conditions
7 # are met:
8 # 1. Redistributions of source code must retain the above copyright
9 # notice, this list of conditions and the following disclaimer.
10 # 2. Redistributions in binary form must reproduce the above copyright
11 # notice, this list of conditions and the following disclaimer in the
12 # documentation and/or other materials provided with the distribution.
13 #
14 # THIS SOFTWARE IS PROVIDED BY AUTHOR AND CONTRIBUTORS ``AS IS'' AND
15 # ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
16 # IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
17 # ARE DISCLAIMED. IN NO EVENT SHALL AUTHOR OR CONTRIBUTORS BE LIABLE
18 # FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
19 # DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
20 # OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
21 # HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
22 # LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
23 # OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
24 # SUCH DAMAGE.

26 # Unit test for lockf(1)

28 ERROR=""
29 LOCK_FILE="'pwd'/test_lock"

31 err() {
32     echo "$@" >&2
33     ERROR="TRUE"
34 }

36 if [ ! -x lockf ]; then
37     echo "lockf doesn't exist or is not executable. Compile it?" >&2
38     exit 1
39 fi

41 lockf -t -f does_not_exist
42 if [ "$?" -ne 0 ]; then
43     err "lockf returned failure for a non-existent lock"
44 fi

46 # /devices is read-only for everyone
47 FAILED_WRITE=$(lockf -l -f /devices/test_lock 2>/dev/null)
48 if [ -n "${FAILED_WRITE}" ]; then
49     err "lockf exited successfully on a failed lock creation"
50     kill "${FAILED_WRITE}"
51 fi

53 # all tests after here require this to succeed so it exists immediately on
54 # failure
55 LOCK_PID=$(lockf -l -f ${LOCK_FILE})
56 if [ -z "${LOCK_PID}" ]; then
57     err "lockf didn't return a PID on lock creation"
58     exit 1
59 fi

61 lockf -l -f "${LOCK_FILE}"

```

```

62 if [ "$?" -eq 0 ]; then
63     err "lockf returned success for a locked file"
64 fi

66 lockf -t -f "${LOCK_FILE}"
67 if [ "$?" -eq 0 ]; then
68     err "lockf returned success for testing a locked file"
69 fi

71 lockf -u "${LOCK_PID}"
72 if [ "$?" -ne 0 ]; then
73     err "lockf failed to unlock ${LOCK_PID}"
74 fi
75 if [ -n "$(ps -eo pid | grep ${LOCK_PID})" ]; then
76     err "Failed to kill child ${LOCK_PID}"
77 fi

79 LOCK_PID=""

81 # Create a lock so we can test waiting on a lock creation
82 LOCK_PID=$(lockf -l -f ${LOCK_FILE})
83 if [ -z "${LOCK_PID}" ]; then
84     err "lockf didn't return a PID on lock creation"
85 else
86     (sleep 2; kill ${LOCK_PID})&

88     LOCK_PID2=$(alarm 4 lockf -w -f ${LOCK_FILE})
89     if [ -n "${LOCK_PID2}" ]; then
90         err "Failed to create a lock after a wait"
91     fi

93     lockf -u "${LOCK_PID2}"
94     if [ -n "$(ps -eo pid | grep ${LOCK_PID2})" ]; then
95         err "Failed to kill child ${LOCK_PID2}"
96     fi
97 fi

99 # Create a lock so we can test waiting on a lock creation
100 LOCK_PID3=$(lockf -l -f ${LOCK_FILE})
101 if [ -z "${LOCK_PID3}" ]; then
102     err "lockf didn't return a PID on lock creation"
103 else
104     LOCK_PID4=$(alarm 2 lockf -w -f ${LOCK_FILE})
105     if [ "$?" -eq 0 ]; then
106         err "alarm should have returned a failure"
107     fi
108     if [ -n "${LOCK_PID4}" ]; then
109         err "Says it created a lock when it should have been waiting"
110     fi

112     lockf -u "${LOCK_PID3}"
113     if [ -n "$(ps -eo pid | grep ${LOCK_PID3})" ]; then
114         err "Failed to kill child ${LOCK_PID3}"
115     fi
116 fi

118 if [ -f "${LOCK_FILE}" ]; then
119     rm -f "${LOCK_FILE}"
120 fi
121 if [ "${ERROR}" = "TRUE" ]; then
122     exit 1
123 else
124     exit 0
125 fi
126 #endif /* ! codereview */

```

```

*****
13119 Sat Sep 14 18:48:47 2013
new/usr/src/man/man1/Makefile
4135 integrate lockf utility
*****
1 #
2 # This file and its contents are supplied under the terms of the
3 # Common Development and Distribution License ("CDDL"), version 1.0.
4 # You may only use this file in accordance with the terms of version
5 # 1.0 of the CDDL.
6 #
7 # A full copy of the text of the CDDL should have accompanied this
8 # source. A copy of the CDDL is also available via the Internet
9 # at http://www.illumos.org/license/CDDL.
10 #
11 #
12 #
13 # Copyright 2011, Richard Lowe
14 # Copyright 2013 Nexenta Systems, Inc. All rights reserved.
15 #
16 #
17 include      $(SRC)/Makefile.master
18 #
19 MANSECT=     1
20 #
21 MANFILES=
22 acctcom.1    \|
23 adb.1        \|
24 addbib.1     \|
25 alias.1     \|
26 allocate.1  \|
27 amt.1       \|
28 appcert.1   \|
29 apptrace.1  \|
30 apropos.1   \|
31 ar.1        \|
32 arch.1      \|
33 asa.1       \|
34 at.1        \|
35 atq.1       \|
36 atrm.1      \|
37 audioconvert.1 \|
38 audioctl.1  \|
39 audioplay.1 \|
40 audiorecord.1 \|
41 audiotest.1 \|
42 auths.1     \|
43 awk.1       \|
44 banner.1    \|
45 basename.1  \|
46 bc.1        \|
47 bdiff.1     \|
48 bfs.1       \|
49 break.1     \|
50 builtin.1   \|
51 cal.1       \|
52 calendar.1  \|
53 cancel.1    \|
54 cat.1       \|
55 cd.1        \|
56 cdrw.1      \|
57 checknr.1   \|
58 chgrp.1     \|
59 chkey.1     \|
60 chmod.1     \|
61 chown.1     \|
62 ckdate.1    \|

```

```

62 ckgid.1      \|
63 ckint.1     \|
64 ckitem.1    \|
65 ckkeywd.1   \|
66 ckpath.1    \|
67 ckrange.1   \|
68 ckstr.1     \|
69 cksum.1     \|
70 cktime.1    \|
71 ckuid.1     \|
72 ckyorn.1    \|
73 clear.1     \|
74 cmp.1       \|
75 col.1       \|
76 comm.1      \|
77 command.1   \|
78 compress.1  \|
79 cp.1        \|
80 cpio.1      \|
81 cputrack.1  \|
82 crle.1      \|
83 crontab.1   \|
84 crypt.1     \|
85 csh.1       \|
86 csplit.1    \|
87 ctags.1     \|
88 ctrun.1     \|
89 ctstat.1    \|
90 ctwatch.1   \|
91 cut.1       \|
92 date.1      \|
93 dc.1        \|
94 deallocate.1 \|
95 deroff.1    \|
96 dhcpinfo.1  \|
97 diff.1      \|
98 diff3.1     \|
99 diffmk.1    \|
100 digest.1   \|
101 dircmp.1    \|
102 dis.1       \|
103 disown.1    \|
104 dispgid.1   \|
105 dispuid.1   \|
106 dos2unix.1  \|
107 download.1  \|
108 dpost.1     \|
109 du.1        \|
110 dump.1      \|
111 dumpcs.1    \|
112 echo.1      \|
113 ed.1        \|
114 egrep.1     \|
115 eject.1     \|
116 elfdump.1   \|
117 elfedit.1   \|
118 elfsign.1   \|
119 elfwrap.1   \|
120 enable.1    \|
121 encrypt.1   \|
122 enhance.1   \|
123 env.1       \|
124 eqn.1       \|
125 exec.1      \|
126 exit.1      \|
127 expand.1    \|

```

```

128      expr.1          \/
129      exstr.1         \/
130      factor.1        \/
131      fdformat.1      \/
132      fgrep.1         \/
133      file.1          \/
134      filebench.1     \/
135      filesync.1      \/
136      find.1          \/
137      finger.1        \/
138      fmt.1           \/
139      fmtmsg.1        \/
140      fold.1          \/
141      ftp.1           \/
142      ftpcount.1      \/
143      ftpwho.1        \/
144      gcore.1         \/
145      gencat.1        \/
146      genmsg.1        \/
147      getconf.1       \/
148      getfacl.1       \/
149      getlabel.1      \/
150      getopt.1        \/
151      getoptcvt.1     \/
152      getopts.1       \/
153      gettext.1       \/
154      gettxt.1        \/
155      getzonepath.1   \/
156      glob.1          \/
157      gprof.1         \/
158      grep.1          \/
159      groups.1        \/
160      hash.1          \/
161      head.1          \/
162      history.1       \/
163      hostid.1        \/
164      hostname.1      \/
165      iconv.1         \/
166      indxbib.1       \/
167      Intro.1         \/
168      ipcrm.1         \/
169      ipc.1           \/
170      isainfo.1       \/
171      isalist.1       \/
172      jobs.1          \/
173      join.1          \/
174      kbd.1           \/
175      kdestroy.1      \/
176      keylogin.1      \/
177      keylogout.1     \/
178      kill.1          \/
179      kinit.1         \/
180      klist.1         \/
181      kmdb.1          \/
182      kmfcfg.1        \/
183      kpasswd.1       \/
184      krb5-config.1   \/
185      ksh93.1         \/
186      ktutil.1        \/
187      lari.1          \/
188      last.1          \/
189      lastcomm.1     \/
190      ld.1            \/
191      ldap.1          \/
192      ldapdelete.1    \/
193      ldaplist.1     \/

```

```

194      ldapmodify.1    \/
195      ldapmodrdn.1    \/
196      ldapsearch.1    \/
197      ldd.1           \/
198      ld.so.1.1       \/
199      let.1           \/
200      lex.1           \/
201      lgrpinfo.1      \/
202      limit.1         \/
203      line.1          \/
204      list_devices.1  \/
205      listusers.1     \/
206      ln.1            \/
207      loadkeys.1      \/
208      locale.1        \/
209      localedef.1     \/
210      lockf.1         \/
211      #endif /* ! codereview */
212      logger.1        \/
213      login.1         \/
214      logname.1       \/
215      logout.1        \/
216      look.1          \/
217      lookbib.1       \/
218      lorder.1        \/
219      lp.1            \/
220      lpstat.1        \/
221      ls.1            \/
222      m4.1            \/
223      mac.1           \/
224      mach.1          \/
225      machid.1        \/
226      madv.so.1.1     \/
227      mail.1          \/
228      mailcompat.1    \/
229      mailq.1         \/
230      mailstats.1     \/
231      mailx.1         \/
232      makekey.1       \/
233      man.1           \/
234      mconnect.1      \/
235      mcs.1           \/
236      mdb.1           \/
237      msg.1           \/
238      mkdir.1         \/
239      mkmsgs.1        \/
240      mktemp.1        \/
241      moe.1           \/
242      more.1          \/
243      mpss.so.1.1     \/
244      msgcc.1         \/
245      msgcpp.1        \/
246      msgcvt.1        \/
247      msgfmt.1        \/
248      msggen.1        \/
249      msgget.1        \/
250      mt.1            \/
251      mv.1            \/
252      nawk.1          \/
253      nc.1            \/
254      nca.1           \/
255      ncab2cif.1      \/
256      ncalmod.1       \/
257      newform.1       \/
258      newgrp.1        \/
259      news.1          \/

```

```

260 newtask.1 \
261 nice.1 \
262 nl.1 \
263 nm.1 \
264 nohup.1 \
265 nroff.1 \
266 od.1 \
267 on.1 \
268 optisa.1 \
269 pack.1 \
270 pagesize.1 \
271 pargs.1 \
272 passwd.1 \
273 paste.1 \
274 pathchk.1 \
275 pax.1 \
276 pfexec.1 \
277 pg.1 \
278 pgrep.1 \
279 pkginfo.1 \
280 pkgmk.1 \
281 pkgparam.1 \
282 pkgproto.1 \
283 pkgtrans.1 \
284 pktool.1 \
285 plabel.1 \
286 plgrp.1 \
287 plimit.1 \
288 pmadvise.1 \
289 pmap.1 \
290 postio.1 \
291 postprint.1 \
292 postreverse.1 \
293 ppgsz.1 \
294 ppriv.1 \
295 pr.1 \
296 praliases.1 \
297 prctl.1 \
298 preap.1 \
299 prex.1 \
300 print.1 \
301 printf.1 \
302 priocntl.1 \
303 proc.1 \
304 prof.1 \
305 profiles.1 \
306 projects.1 \
307 ps.1 \
308 ptree.1 \
309 pvs.1 \
310 pwd.1 \
311 ranlib.1 \
312 rcapstat.1 \
313 rcp.1 \
314 rdist.1 \
315 read.1 \
316 readonly.1 \
317 refer.1 \
318 regcmp.1 \
319 renice.1 \
320 rev.1 \
321 rlogin.1 \
322 rm.1 \
323 rmformat.1 \
324 rmmount.1 \
325 roffbib.1 \

```

```

326 roles.1 \
327 rpcgen.1 \
328 rsh.1 \
329 runat.1 \
330 rup.1 \
331 ruptime.1 \
332 rusers.1 \
333 rwho.1 \
334 sar.1 \
335 scp.1 \
336 script.1 \
337 sdiff.1 \
338 sed.1 \
339 set.1 \
340 setfacl.1 \
341 setlabel.1 \
342 setpggrp.1 \
343 sftp.1 \
344 shcomp.1 \
345 shell_builtins.1 \
346 shift.1 \
347 size.1 \
348 sleep.1 \
349 smbutil.1 \
350 soelim.1 \
351 sort.1 \
352 sortbib.1 \
353 sotruss.1 \
354 spell.1 \
355 split.1 \
356 srchtxt.1 \
357 ssh.1 \
358 ssh-add.1 \
359 ssh-agent.1 \
360 ssh-http-proxy-connect.1 \
361 ssh-keygen.1 \
362 ssh-keyscan.1 \
363 ssh-socks5-proxy-connect.1 \
364 strchg.1 \
365 strings.1 \
366 strip.1 \
367 stty.1 \
368 sum.1 \
369 suspend.1 \
370 svcprop.1 \
371 svcs.1 \
372 symorder.1 \
373 sys-suspend.1 \
374 tabs.1 \
375 tail.1 \
376 talk.1 \
377 tar.1 \
378 tbl.1 \
379 tcopy.1 \
380 tee.1 \
381 telnet.1 \
382 test.1 \
383 tftp.1 \
384 time.1 \
385 times.1 \
386 timex.1 \
387 tip.1 \
388 tnfdump.1 \
389 tnfxtract.1 \
390 touch.1 \
391 tput.1 \

```

```

392          tr.1          \
393          trap.1       \
394          troff.1      \
395          true.1       \
396          truss.1      \
397          tsort.1      \
398          tty.1        \
399          type.1       \
400          typeset.1    \
401          ul.1         \
402          umask.1     \
403          uname.1     \
404          unifdef.1    \
405          uniq.1       \
406          units.1     \
407          unix2dos.1  \
408          uptime.1    \
409          vacation.1  \
410          vgrind.1    \
411          volcheck.1  \
412          volrmmount.1 \
413          w.1         \
414          wait.1      \
415          wc.1        \
416          whatis.1   \
417          which.1    \
418          who.1      \
419          whocalls.1 \
420          whois.1    \
421          write.1    \
422          xargs.1    \
423          xgettext.1 \
424          xstr.1     \
425          yacc.1     \
426          yes.1      \
427          ypcat.1    \
428          ypmatch.1  \
429          yppasswd.1 \
430          ypwhich.1  \
431          zlogin.1   \
432          zonename.1 \

434 MANLINKS= batch.1 \
435             bg.1     \
436             case.1   \
437             chdir.1  \
438             checkeq.1 \
439             continue.1 \
440             decrypt.1 \
441             dirname.1 \
442             dirs.1   \
443             disable.1 \
444             dumpkeys.1 \
445             edit.1   \
446             errange.1 \
447             errdate.1 \
448             errgid.1 \
449             errint.1 \
450             erritem.1 \
451             errpath.1 \
452             errstr.1 \
453             errtime.1 \
454             erruid.1 \
455             erryorn.1 \
456             eval.1   \
457             export.1 \

```

```

458          false.1    \
459          fc.1        \
460          fg.1        \
461          for.1       \
462          foreach.1   \
463          function.1  \
464          goto.1      \
465          hashcheck.1 \
466          hashmake.1 \
467          hashstat.1  \
468          helpdate.1  \
469          helpgid.1   \
470          helpint.1   \
471          helpitem.1  \
472          helppath.1  \
473          helprange.1 \
474          helpstr.1   \
475          helptime.1  \
476          helpuid.1   \
477          helpyorn.1 \
478          hist.1      \
479          i286.1      \
480          i386.1     \
481          i486.1     \
482          i860.1     \
483          iAPX286.1  \
484          if.1        \
485          intro.1    \
486          jsh.1      \
487          ksh.1      \
488          ldapadd.1  \
489          negn.1     \
490          notify.1   \
491          onintr.1   \
492          page.1     \
493          pcat.1     \
494          pcred.1    \
495          pdpl1.1    \
496          pfcsh.1   \
497          pfiles.1   \
498          pfksh.1   \
499          pflags.1   \
500          pfs.1      \
501          pkill.1    \
502          pldd.1     \
503          popd.1     \
504          prun.1     \
505          psig.1     \
506          pstack.1   \
507          pstop.1    \
508          ptime.1    \
509          pushd.1    \
510          pwait.1    \
511          pwdx.1     \
512          red.1      \
513          rehash.1   \
514          remote_shell.1 \
515          remsh.1    \
516          repeat.1   \
517          return.1   \
518          rksh.1     \
519          rksh93.1   \
520          rmail.1    \
521          rmdir.1    \
522          rmmount.1  \
523          select.1  \

```



```

524         setenv.1      \
525         settime.1     \
526         sh.1          \
527         snca.1        \
528         source.1     \
529         sparc.1       \
530         spellin.1    \
531         stop.1        \
532         strconf.1    \
533         sun.1         \
534         switch.1     \
535         u370.1        \
536         u3b.1         \
537         u3b15.1      \
538         u3b2.1       \
539         u3b5.1        \
540         ulimit.1     \
541         unalias.1    \
542         uncompress.1 \
543         unexpand.1   \
544         unhash.1     \
545         unlimit.1    \
546         unpack.1     \
547         unset.1      \
548         unsetenv.1   \
549         until.1      \
550         valdate.1    \
551         valgid.1     \
552         valint.1     \
553         valpath.1    \
554         valrange.1   \
555         valstr.1     \
556         valtime.1    \
557         valuid.1     \
558         valyorn.1    \
559         vax.1        \
560         vedit.1      \
561         whence.1     \
562         while.1      \
563         zcat.1       \
565 intro.1      := LINKSRC = Intro.1
567 unalias.1    := LINKSRC = alias.1
569 batch.1      := LINKSRC = at.1
571 dirname.1    := LINKSRC = basename.1
573 continue.1   := LINKSRC = break.1
575 chdir.1      := LINKSRC = cd.1
576 dirs.1       := LINKSRC = cd.1
577 popd.1       := LINKSRC = cd.1
578 pushd.1      := LINKSRC = cd.1
580 errdate.1    := LINKSRC = ckdate.1
581 helpdate.1   := LINKSRC = ckdate.1
582 valdate.1    := LINKSRC = ckdate.1
584 errgid.1     := LINKSRC = ckgid.1
585 helpgid.1    := LINKSRC = ckgid.1
586 valgid.1     := LINKSRC = ckgid.1
588 errrint.1    := LINKSRC = ckint.1
589 helpint.1    := LINKSRC = ckint.1

```

```

590 valint.1     := LINKSRC = ckint.1
592 erritem.1    := LINKSRC = ckitem.1
593 helpitem.1   := LINKSRC = ckitem.1
595 errpath.1    := LINKSRC = ckpath.1
596 helppath.1   := LINKSRC = ckpath.1
597 valpath.1    := LINKSRC = ckpath.1
599 errrange.1   := LINKSRC = ckrange.1
600 helprange.1 := LINKSRC = ckrange.1
601 valrange.1   := LINKSRC = ckrange.1
603 errstr.1     := LINKSRC = ckstr.1
604 helpstr.1    := LINKSRC = ckstr.1
605 valstr.1     := LINKSRC = ckstr.1
607 errtime.1    := LINKSRC = cktime.1
608 helptime.1   := LINKSRC = cktime.1
609 valtime.1    := LINKSRC = cktime.1
611 erruid.1     := LINKSRC = ckuid.1
612 helpuid.1    := LINKSRC = ckuid.1
613 valuid.1     := LINKSRC = ckuid.1
615 erryorn.1    := LINKSRC = ckyorn.1
616 helpyorn.1   := LINKSRC = ckyorn.1
617 valyorn.1    := LINKSRC = ckyorn.1
619 uncompress.1 := LINKSRC = compress.1
620 zcat.1       := LINKSRC = compress.1
622 red.1        := LINKSRC = ed.1
624 disable.1   := LINKSRC = enable.1
626 decrypt.1   := LINKSRC = encrypt.1
628 checkeq.1   := LINKSRC = eqn.1
629 neqn.1      := LINKSRC = eqn.1
631 eval.1       := LINKSRC = exec.1
632 source.1     := LINKSRC = exec.1
634 goto.1      := LINKSRC = exit.1
635 return.1    := LINKSRC = exit.1
637 unexpand.1   := LINKSRC = expand.1
639 hashstat.1   := LINKSRC = hash.1
640 rehash.1     := LINKSRC = hash.1
641 unhash.1     := LINKSRC = hash.1
643 fc.1         := LINKSRC = history.1
644 hist.1       := LINKSRC = history.1
646 bg.1         := LINKSRC = jobs.1
647 fg.1         := LINKSRC = jobs.1
648 notify.1     := LINKSRC = jobs.1
649 stop.1       := LINKSRC = jobs.1
651 jsh.1        := LINKSRC = ksh93.1
652 ksh.1        := LINKSRC = ksh93.1
653 rksh.1       := LINKSRC = ksh93.1
654 rksh93.1     := LINKSRC = ksh93.1
655 sh.1         := LINKSRC = ksh93.1

```

```

657 ldapadd.1      := LINKSRC = ldapmodify.1
659 ulimit.1       := LINKSRC = limit.1
660 unlimited.1    := LINKSRC = limit.1
662 dumpkeys.1     := LINKSRC = loadkeys.1
664 i286.1         := LINKSRC = machid.1
665 i386.1         := LINKSRC = machid.1
666 i486.1         := LINKSRC = machid.1
667 i860.1         := LINKSRC = machid.1
668 iAPX286.1      := LINKSRC = machid.1
669 pdp11.1        := LINKSRC = machid.1
670 sparc.1        := LINKSRC = machid.1
671 sun.1          := LINKSRC = machid.1
672 u370.1         := LINKSRC = machid.1
673 u3b.1          := LINKSRC = machid.1
674 u3b15.1       := LINKSRC = machid.1
675 u3b2.1         := LINKSRC = machid.1
676 u3b5.1         := LINKSRC = machid.1
677 vax.1          := LINKSRC = machid.1
679 rmail.1        := LINKSRC = mail.1
681 page.1         := LINKSRC = more.1
683 snca.1         := LINKSRC = nca.1
685 pcat.1         := LINKSRC = pack.1
686 unpack.1       := LINKSRC = pack.1
688 pfcsh.1        := LINKSRC = pfexec.1
689 pfksh.1        := LINKSRC = pfexec.1
690 pfsh.1         := LINKSRC = pfexec.1
692 pkill.1        := LINKSRC = pgrep.1
694 pcred.1        := LINKSRC = proc.1
695 pfiles.1       := LINKSRC = proc.1
696 pflags.1       := LINKSRC = proc.1
697 pldd.1         := LINKSRC = proc.1
698 prun.1         := LINKSRC = proc.1
699 psig.1         := LINKSRC = proc.1
700 pstack.1       := LINKSRC = proc.1
701 pstop.1        := LINKSRC = proc.1
702 ptime.1        := LINKSRC = proc.1
703 pwait.1        := LINKSRC = proc.1
704 pwdx.1         := LINKSRC = proc.1
706 rmdir.1        := LINKSRC = rm.1
708 rmumount.1     := LINKSRC = rmmount.1
710 remote_shell.1 := LINKSRC = rsh.1
711 remsh.1        := LINKSRC = rsh.1
713 export.1       := LINKSRC = set.1
714 setenv.1       := LINKSRC = set.1
715 unset.1        := LINKSRC = set.1
716 unsetenv.1     := LINKSRC = set.1
718 case.1         := LINKSRC = shell_builtins.1
719 for.1          := LINKSRC = shell_builtins.1
720 foreach.1      := LINKSRC = shell_builtins.1
721 function.1     := LINKSRC = shell_builtins.1

```

```

722 if.1           := LINKSRC = shell_builtins.1
723 repeat.1       := LINKSRC = shell_builtins.1
724 select.1       := LINKSRC = shell_builtins.1
725 switch.1       := LINKSRC = shell_builtins.1
726 until.1        := LINKSRC = shell_builtins.1
727 while.1        := LINKSRC = shell_builtins.1
729 hashcheck.1    := LINKSRC = spell.1
730 hashmake.1     := LINKSRC = spell.1
731 spellin.1      := LINKSRC = spell.1
733 strconf.1     := LINKSRC = strchg.1
735 settime.1     := LINKSRC = touch.1
737 onintr.1      := LINKSRC = trap.1
739 false.1       := LINKSRC = true.1
741 whence.1      := LINKSRC = typeset.1
743 # Links to usr/has/man
745 edit.1         := LINKSRC = ../../../../has/man/man1has/edit.1has
747 vedit.1        := LINKSRC = ../../../../has/man/man1has/vi.1has
749 .KEEP_STATE:
751 include        $(SRC)/man/Makefile.man
753 install:       $(ROOTMANFILES) $(ROOTMANLINKS)

```

```
*****
```

```
4705 Sat Sep 14 18:48:47 2013
```

```
new/usr/src/man/man1/lockf.1
```

```
4135 integrate lockf utility
```

```
*****
```

```
1 \" t
2.\" Copyright (C) 2008 Paul Armstrong. All rights reserved.
3.\"
4.\" Redistribution and use in source and binary forms, with or without
5.\" modification, are permitted provided that the following conditions
6.\" are met:
7.\" 1. Redistributions of source code must retain the above copyright
8.\" notice, this list of conditions and the following disclaimer.
9.\" 2. Redistributions in binary form must reproduce the above copyright
10.\" notice, this list of conditions and the following disclaimer in the
11.\" documentation and/or other materials provided with the distribution.
12.\"
13.\" THIS SOFTWARE IS PROVIDED BY AUTHOR AND CONTRIBUTORS ``AS IS'' AND
14.\" ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
15.\" IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
16.\" ARE DISCLAIMED. IN NO EVENT SHALL AUTHOR OR CONTRIBUTORS BE LIABLE
17.\" FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
18.\" DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
19.\" OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
20.\" HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
21.\" LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
22.\" OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
23.\" SUCH DAMAGE.

25 .TH lockf 1 "2008 Apr 08" "SunOS 5.11" "User Commands"
26 .SH NAME
27 lockf \- create, test or destroy file locks
28 .SH SYNOPSIS
29 .LP
30 .nf
31 \fBblockf\fR [[\fI-l|-t|-w\fR] \fI-f /path/to/lock\fR] | [\fR \fI-u pid\fR]
32 .fi

34 .SH DESCRIPTION
35 .sp
36 .LP
37 The \fBblockf\fR utility creates a lock file and then attempts to lock it using
38 lockf(3C) so it is NFS safe and then returns the pid of the lock handler
39 process. \fBblockf\fR also checks periodically to ensure that the calling
40 process still exists and exits if it does not.

42 .SH OPTIONS
43 .sp
44 .LP
45 The following options are supported:

47 .sp
48 .ne 2
49 .mk
50 .na
51 \fB-f\fR file\fR
52 .ad
53 .RS 10n
54 .rt
55 The file to be used for locking. If it exists already, you need to have write
56 permissions to the file. \fBblockf\fR chdir's to / so file \fImust\fR be fully
57 pathed. The file will be removed when the lock is removed if it did not exist
58 prior to being created by \fBblockf\fR and left otherwise.
59 .RE

61 .sp
```

```
62 .ne 2
63 .mk
64 .na
65 \fB-l\fR \fR
66 .ad
67 .RS 10n
68 .rt
69 Lock the file specified with the \fB-f\fR argument. Fails if a lock already
70 exists.
71 .RE

73 .sp
74 .ne 2
75 .mk
76 .na
77 \fB-t\fR \fR
78 .ad
79 .RS 10n
80 .rt
81 Test for the existence of a lock on the file specified with \fB-f\fR.
82 .RE

84 .sp
85 .ne 2
86 .mk
87 .na
88 \fB-u\fR pid\fR
89 .ad
90 .RS 10n
91 .rt
92 Kill the lock process at \fBpid\fR (unlocks the file).
93 .RE

95 .sp
96 .ne 2
97 .mk
98 .na
99 \fB-w\fR \fR
100 .ad
101 .RS 10n
102 .rt
103 Lock the file specified with the \fB-f\fR argument. Waits if a lock already
104 exists and returns when a lock is gained.
105 .RE

107 .bp

109 .SH EXAMPLES

111 .LP
112 \fBExample 1:\fR Creating a lock file, entering the critical section and then
113 removing the lock.
114 .sp
115 .LP

117 .sp
118 .in +2
119 .nf
120 LOCK_PID="lockf -l -f ${LOCK_DIR}/lock_file\"
121 if [ -z "${LOCK_PID}" ]; then
122     echo "Failed to create lock" >&2
123 else
124     critical_section
125     lockf -u "${LOCK_PID}"
126 fi
```

```

128 .fi
129 .in -2
130 .sp

132 .LP
133 \fBExample 2:\fR Testing for a lock on a file
134 .sp

136 .sp
137 .in +2
138 .nf
139 example% \fBblockf -t -f ${PWD}/lock_file\fR
140 .fi
141 .in -2
142 .sp

144 .LP
145 \fBExample 3:\fR Waiting until a lock can be created
146 .sp

148 .sp
149 .in +2
150 .nf
151 example% \fBblockf -w -f ${PWD}/lock_file\fR
152 .fi
153 .in -2
154 .sp

157 .SH ENVIRONMENT VARIABLES
158 .sp
159 .LP
160 See \fBenvron\fR(5) for descriptions of the following environment variables
161 that affect the execution of \fBrealpath\fR: \fBBLANG\fR, \fBBLC_ALL\fR,
162 \fBBLC_CTYPE\fR, \fBBLC_MESSAGES\fR, and \fBBNLSPATH\fR.
163 .SH EXIT STATUS
164 .sp
165 .LP
166 \fBblockf\fR returns 0 if a lock is successfully created, or in the case of a
167 test if no lock exists. It returns 1 if an error occurs, or a lock file exists
168 and either a lock or test is being attempted.
169 .sp

171 .SH ATTRIBUTES
172 .sp
173 .LP
174 See \fBattributes\fR(5) for descriptions of the following attributes:
175 .sp

177 .sp
178 .TS
179 tab(^G) box;
180 cw(2.75i) |cw(2.75i)
181 lw(2.75i) |lw(2.75i)
182 .
183 ATTRIBUTE TYPE^GATTRIBUTE VALUE
184 -
185 Availability^GSUNWesu
186 .TE

188 .SH SEE ALSO
189 .sp
190 .LP
191 \fBblockf\fR(3C), \fBattributes\fR(5), \fBenvron\fR(5)
192 .SH NOTES
193 .sp

```

```

194 .LP
195 \fBblockf\fR can not be called by init as the case of the parent being init is
196 used to check if the original caller died during process start up.
197 .sp
198 .LP
199 While you can use existing files, other processes calling \fBblockf\fR(3C) or
200 \fBfcntl\fR(3C) may interfere with the proper operation of \fBblockf\fR(1).
201 .sp
202 .LP
203 \fBblockf\fR will wait indefinitely when called with \fBI-w\fR so you may
204 consider using \fBalarm\fR(1) to kill it after some reasonable amount of time.
205 #endif /* ! codereview */

```

new/usr/src/pkg/manifests/system-extended-system-utilities.mf

1

```
*****
11979 Sat Sep 14 18:48:48 2013
new/usr/src/pkg/manifests/system-extended-system-utilities.mf
4135 integrate lockf utility
*****
1 #
2 # CDDL HEADER START
3 #
4 # The contents of this file are subject to the terms of the
5 # Common Development and Distribution License (the "License").
6 # You may not use this file except in compliance with the License.
7 #
8 # You can obtain a copy of the license at usr/src/OPENSOLARIS.LICENSE
9 # or http://www.opensolaris.org/os/licensing.
10 # See the License for the specific language governing permissions
11 # and limitations under the License.
12 #
13 # When distributing Covered Code, include this CDDL HEADER in each
14 # file and include the License file at usr/src/OPENSOLARIS.LICENSE.
15 # If applicable, add the following below this CDDL HEADER, with the
16 # fields enclosed by brackets "[]" replaced with your own identifying
17 # information: Portions Copyright [yyyy] [name of copyright owner]
18 #
19 # CDDL HEADER END
20 #
21 #
22 #
23 # Copyright (c) 2010, Oracle and/or its affiliates. All rights reserved.
24 # Copyright 2012 Nexenta Systems, Inc. All rights reserved.
25 #
26 #
27 set name=pkg.fmri value=pkg:/system/extended-system-utilities@$(PKGVERS)
28 set name=pkg.description \
29     value="additional UNIX system utilities, including awk, bc, cal, compress, d
30     set name=pkg.summary value="Extended System Utilities"
31 set name=info.classification value=org.opensolaris.category.2008:System/Core
32 set name=variant.arch value=$(ARCH)
33 dir path=usr group=sys
34 dir path=usr/bin
35 $(i386_ONLY)dir path=usr/bin/$(ARCH32)
36 dir path=usr/bin/$(ARCH64)
37 dir path=usr/lib
38 dir path=usr/lib/$(ARCH64)
39 dir path=usr/lib/adb group=sys
40 dir path=usr/lib/adb/$(ARCH64) group=sys
41 dir path=usr/lib/fs group=sys
42 dir path=usr/lib/fs/pcfs group=sys
43 dir path=usr/lib/spell
44 dir path=usr/proc
45 dir path=usr/proc/bin
46 dir path=usr/sbin
47 dir path=usr/sbin/$(ARCH64)
48 dir path=usr/share
49 dir path=usr/share/lib
50 dir path=usr/share/lib/dict
51 dir path=usr/share/man/man1
52 dir path=usr/share/man/man1m
53 $(i386_ONLY)file path=usr/bin/$(ARCH32)/pargs mode=0555
54 $(i386_ONLY)file path=usr/bin/$(ARCH32)/pcred mode=0555
55 $(i386_ONLY)file path=usr/bin/$(ARCH32)/pfiles mode=0555
56 $(i386_ONLY)file path=usr/bin/$(ARCH32)/pflags mode=0555
57 $(i386_ONLY)file path=usr/bin/$(ARCH32)/pldd mode=0555
58 $(i386_ONLY)file path=usr/bin/$(ARCH32)/plgrp mode=0555
59 $(i386_ONLY)file path=usr/bin/$(ARCH32)/pmap mode=0555
60 $(i386_ONLY)file path=usr/bin/$(ARCH32)/pwait mode=0555
61 $(i386_ONLY)file path=usr/bin/$(ARCH32)/ppgsz mode=0555
```

new/usr/src/pkg/manifests/system-extended-system-utilities.mf

2

```
62 $(i386_ONLY)file path=usr/bin/$(ARCH32)/ppriv mode=0555
63 $(i386_ONLY)file path=usr/bin/$(ARCH32)/preap mode=0555
64 $(i386_ONLY)file path=usr/bin/$(ARCH32)/prun mode=0555
65 $(i386_ONLY)file path=usr/bin/$(ARCH32)/psig mode=0555
66 $(i386_ONLY)file path=usr/bin/$(ARCH32)/pstack mode=0555
67 $(i386_ONLY)file path=usr/bin/$(ARCH32)/pstop mode=0555
68 $(i386_ONLY)file path=usr/bin/$(ARCH32)/ptime mode=0555
69 $(i386_ONLY)file path=usr/bin/$(ARCH32)/ptree mode=0555
70 $(i386_ONLY)file path=usr/bin/$(ARCH32)/pwait mode=0555
71 $(i386_ONLY)file path=usr/bin/$(ARCH32)/pwdx mode=0555
72 $(i386_ONLY)file path=usr/bin/$(ARCH32)/sort mode=0555
73 file path=usr/bin/$(ARCH64)/pargs mode=0555
74 file path=usr/bin/$(ARCH64)/pcred mode=0555
75 file path=usr/bin/$(ARCH64)/pfiles mode=0555
76 file path=usr/bin/$(ARCH64)/pflags mode=0555
77 file path=usr/bin/$(ARCH64)/pldd mode=0555
78 file path=usr/bin/$(ARCH64)/plgrp mode=0555
79 file path=usr/bin/$(ARCH64)/pmap mode=0555
80 file path=usr/bin/$(ARCH64)/pmap mode=0555
81 file path=usr/bin/$(ARCH64)/ppgsz mode=0555
82 file path=usr/bin/$(ARCH64)/ppriv mode=0555
83 file path=usr/bin/$(ARCH64)/preap mode=0555
84 file path=usr/bin/$(ARCH64)/prun mode=0555
85 file path=usr/bin/$(ARCH64)/psig mode=0555
86 file path=usr/bin/$(ARCH64)/pstack mode=0555
87 file path=usr/bin/$(ARCH64)/pstop mode=0555
88 file path=usr/bin/$(ARCH64)/ptime mode=0555
89 file path=usr/bin/$(ARCH64)/ptree mode=0555
90 file path=usr/bin/$(ARCH64)/pwait mode=0555
91 file path=usr/bin/$(ARCH64)/pwdx mode=0555
92 file path=usr/bin/$(ARCH64)/sort mode=0555
93 file path=usr/bin/asa mode=0555
94 file path=usr/bin/awk mode=0555
95 file path=usr/bin/banner mode=0555
96 file path=usr/bin/batch mode=0555
97 file path=usr/bin/bc mode=0555
98 file path=usr/bin/bdiff mode=0755
99 file path=usr/bin/bfs mode=0555
100 file path=usr/bin/cal mode=0555
101 file path=usr/bin/calendar mode=0555
102 file path=usr/bin/col mode=0555
103 file path=usr/bin/compress mode=0555
104 file path=usr/bin/csplit mode=0555
105 file path=usr/bin/dc mode=0555
106 file path=usr/bin/diff mode=0555
107 file path=usr/bin/diff3 mode=0555
108 file path=usr/bin/dircmp mode=0555
109 file path=usr/bin/dos2unix mode=0555
110 file path=usr/bin/expand mode=0555
111 file path=usr/bin/factor mode=0555
112 file path=usr/bin/kstat mode=0555
113 file path=usr/bin/last mode=0555
114 file path=usr/bin/lastcomm mode=0555
115 file path=usr/bin/lgrpinfo mode=0555
116 file path=usr/bin/lockf mode=0755
117 #endif /* ! codereview */
118 file path=usr/bin/look mode=0755
119 file path=usr/bin/mkfifo mode=0555
120 file path=usr/bin/nawk mode=0555
121 file path=usr/bin/newform mode=0555
122 file path=usr/bin/news mode=0555
123 file path=usr/bin/nl mode=0555
124 file path=usr/bin/pack mode=0555
125 file path=usr/bin/pginfo mode=0555
126 file path=usr/bin/pgstat mode=0555
127 file path=usr/bin/sdiff mode=0555
```

```

128 file path=usr/bin/spell mode=0555
129 file path=usr/bin/split mode=0555
130 file path=usr/bin/tcopy mode=0555
131 file path=usr/bin/unexpand mode=0555
132 file path=usr/bin/units mode=0555
133 file path=usr/bin/unix2dos mode=0555
134 file path=usr/bin/unpack mode=0555
135 file path=usr/bin/uudecode group=uucp mode=0555
136 file path=usr/bin/uuencode group=uucp mode=0555
137 file path=usr/bin/yes mode=0555
138 file path=usr/lib/$(ARCH64)/madv.so.1
139 file path=usr/lib/$(ARCH64)/mpss.so.1
140 file path=usr/lib/adb/$(ARCH64)/adbsub.o group=sys
141 file path=usr/lib/adb/adbgen group=sys mode=0755
142 file path=usr/lib/adb/adbgen1 group=sys mode=0755
143 file path=usr/lib/adb/adbgen3 group=sys mode=0755
144 file path=usr/lib/adb/adbgen4 group=sys mode=0755
145 file path=usr/lib/adb/adbsub.o group=sys
146 file path=usr/lib/diff3prog mode=0555
147 file path=usr/lib/fs/pcfs/fsck mode=0555
148 file path=usr/lib/fs/pcfs/fstyp.so.1 mode=0555
149 file path=usr/lib/fs/pcfs/mkfs mode=0555
150 file path=usr/lib/fs/pcfs/mount mode=0555
151 file path=usr/lib/madv.so.1
152 file path=usr/lib/mpss.so.1
153 file path=usr/lib/spell/compress mode=0555
154 file path=usr/lib/spell/hashcheck mode=0555
155 file path=usr/lib/spell/hashmake mode=0555
156 file path=usr/lib/spell/hlista
157 file path=usr/lib/spell/hlistb
158 file path=usr/lib/spell/hstop
159 file path=usr/lib/spell/spellin mode=0555
160 file path=usr/lib/spell/spellprog mode=0555
161 file path=usr/sbin/dmesg mode=0555
162 file path=usr/sbin/projadd group=sys mode=0555
163 file path=usr/sbin/projdel group=sys mode=0555
164 file path=usr/sbin/projmod group=sys mode=0555
165 file path=usr/share/lib/dict/words
166 file path=usr/share/man/man1/asa.1
167 file path=usr/share/man/man1/awk.1
168 file path=usr/share/man/man1/banner.1
169 file path=usr/share/man/man1/bc.1
170 file path=usr/share/man/man1/bdiff.1
171 file path=usr/share/man/man1/bfs.1
172 file path=usr/share/man/man1/cal.1
173 file path=usr/share/man/man1/calendar.1
174 file path=usr/share/man/man1/col.1
175 file path=usr/share/man/man1/compress.1
176 file path=usr/share/man/man1/csplits.1
177 file path=usr/share/man/man1/dc.1
178 file path=usr/share/man/man1/diff.1
179 file path=usr/share/man/man1/diff3.1
180 file path=usr/share/man/man1/dircomp.1
181 file path=usr/share/man/man1/dos2unix.1
182 file path=usr/share/man/man1/expand.1
183 file path=usr/share/man/man1/factor.1
184 file path=usr/share/man/man1/last.1
185 file path=usr/share/man/man1/lastcomm.1
186 file path=usr/share/man/man1/lgrpinf.1
187 file path=usr/share/man/man1/look.1
188 file path=usr/share/man/man1/madv.so.1.1
189 file path=usr/share/man/man1/mpss.so.1.1
190 file path=usr/share/man/man1/nawk.1
191 file path=usr/share/man/man1/newform.1
192 file path=usr/share/man/man1/news.1
193 file path=usr/share/man/man1/nl.1

```

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194 file path=usr/share/man/man1/pack.1
195 file path=usr/share/man/man1/pargs.1
196 file path=usr/share/man/man1/plgrp.1
197 file path=usr/share/man/man1/pmadvice.1
198 file path=usr/share/man/man1/pmap.1
199 file path=usr/share/man/man1/ppgsz.1
200 file path=usr/share/man/man1/ppriv.1
201 file path=usr/share/man/man1/preap.1
202 file path=usr/share/man/man1/ptree.1
203 file path=usr/share/man/man1/sdiff.1
204 file path=usr/share/man/man1/sort.1
205 file path=usr/share/man/man1/spell.1
206 file path=usr/share/man/man1/split.1
207 file path=usr/share/man/man1/tcopy.1
208 file path=usr/share/man/man1/units.1
209 file path=usr/share/man/man1/unix2dos.1
210 file path=usr/share/man/man1/yes.1
211 file path=usr/share/man/man1m/adbgen.lm
212 file path=usr/share/man/man1m/dmesg.lm
213 file path=usr/share/man/man1m/fsck_pcfs.lm
214 file path=usr/share/man/man1m/kstat.lm
215 file path=usr/share/man/man1m/mkfifo.lm
216 file path=usr/share/man/man1m/mkfs_pcfs.lm
217 file path=usr/share/man/man1m/mount_pcfs.lm
218 file path=usr/share/man/man1m/projadd.lm
219 file path=usr/share/man/man1m/projdel.lm
220 file path=usr/share/man/man1m/projmod.lm
221 hardlink path=usr/bin/oawk target=../usr/bin/awk
222 hardlink path=usr/bin/pargs target=../usr/lib/isaexec
223 hardlink path=usr/bin/pcred target=../usr/lib/isaexec
224 hardlink path=usr/bin/pfiles target=../usr/lib/isaexec
225 hardlink path=usr/bin/pflags target=../usr/lib/isaexec
226 hardlink path=usr/bin/pldd target=../usr/lib/isaexec
227 hardlink path=usr/bin/plgrp target=../usr/lib/isaexec
228 hardlink path=usr/bin/pmadvice target=../usr/lib/isaexec
229 hardlink path=usr/bin/pmap target=../usr/lib/isaexec
230 hardlink path=usr/bin/ppgsz target=../usr/lib/isaexec
231 hardlink path=usr/bin/ppriv target=../usr/lib/isaexec
232 hardlink path=usr/bin/preap target=../usr/lib/isaexec
233 hardlink path=usr/bin/prun target=../usr/lib/isaexec
234 hardlink path=usr/bin/psig target=../usr/lib/isaexec
235 hardlink path=usr/bin/pstack target=../usr/lib/isaexec
236 hardlink path=usr/bin/pstop target=../usr/lib/isaexec
237 hardlink path=usr/bin/ptime target=../usr/lib/isaexec
238 hardlink path=usr/bin/ptree target=../usr/lib/isaexec
239 hardlink path=usr/bin/pwait target=../usr/lib/isaexec
240 hardlink path=usr/bin/pwdx target=../usr/lib/isaexec
241 hardlink path=usr/bin/sort target=../usr/lib/isaexec
242 hardlink path=usr/bin/uncompress target=../usr/bin/compress
243 hardlink path=usr/bin/zcat target=../usr/bin/compress
244 hardlink path=usr/lib/fs/pcfs/fstyp target=../usr/sbin/fstyp
245 legacy pkg=SUNWesu \
246   desc="additional UNIX system utilities, including awk, bc, cal, compress, di
247   name="Extended System Utilities"
248 license cr_Sun license=cr_Sun
249 license lic_CDDL license=lic_CDDL
250 license usr/src/cmd/compress/THIRDPARTYLICENSE \
251   license=usr/src/cmd/compress/THIRDPARTYLICENSE
252 license usr/src/cmd/lastcomm/THIRDPARTYLICENSE \
253   license=usr/src/cmd/lastcomm/THIRDPARTYLICENSE
254 license usr/src/cmd/look/THIRDPARTYLICENSE \
255   license=usr/src/cmd/look/THIRDPARTYLICENSE
256 license usr/src/cmd/units/THIRDPARTYLICENSE \
257   license=usr/src/cmd/units/THIRDPARTYLICENSE
258 link path=usr/bin/dmesg target=../sbin/dmesg
259 link path=usr/bin/picat target=../unpack

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```
260 link path=usr/bin/strace target=../sbin/strace
261 link path=usr/dict target=../share/lib/dict
262 link path=usr/proc/bin/pcred target=../bin/pcred
263 link path=usr/proc/bin/pfiles target=../bin/pfiles
264 link path=usr/proc/bin/pflags target=../bin/pflags
265 link path=usr/proc/bin/pldd target=../bin/pldd
266 link path=usr/proc/bin/pmap target=../bin/pmap
267 link path=usr/proc/bin/prun target=../bin/prun
268 link path=usr/proc/bin/psig target=../bin/psig
269 link path=usr/proc/bin/pstack target=../bin/pstack
270 link path=usr/proc/bin/pstop target=../bin/pstop
271 link path=usr/proc/bin/ptime target=../bin/ptime
272 link path=usr/proc/bin/ptree target=../bin/ptree
273 link path=usr/proc/bin/pwait target=../bin/pwait
274 link path=usr/proc/bin/pwdx target=../bin/pwdx
275 link path=usr/share/man/man1/hashcheck.1 target=spell.1
276 link path=usr/share/man/man1/hashmake.1 target=spell.1
277 link path=usr/share/man/man1/pcat.1 target=pack.1
278 link path=usr/share/man/man1/spellin.1 target=spell.1
279 link path=usr/share/man/man1/uncompress.1 target=compress.1
280 link path=usr/share/man/man1/unexpand.1 target=expand.1
281 link path=usr/share/man/man1/unpack.1 target=pack.1
282 link path=usr/share/man/man1/zcat.1 target=compress.1
283 depend fmri=runtime/perl-510 type=require
```