

new/usr/src/cmd/su/su.c

1

```
*****
38481 Wed Sep 17 00:13:22 2014
new/usr/src/cmd/su/su.c
5110 want pam_timestamp module
*****
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 * Copyright (c) 1988, 2010, Oracle and/or its affiliates. All rights reserved.
23 * Copyright 2012 Milan Jurik. All rights reserved.
24 * Copyright 2014 Nexenta Systems, Inc.
25 */
26 /*      Copyright (c) 1984, 1986, 1987, 1988, 1989 AT&T */
27 /*      All Rights Reserved */
28
29 /*      Copyright (c) 1987, 1988 Microsoft Corporation */
30 /*      All Rights Reserved */
31
32 /*
33 *      su [-] [name [arg ...]] change userid, '-' changes environment.
34 *      If SULONG is defined, all attempts to su to another user are
35 *      logged there.
36 *      If CONSOLE is defined, all successful attempts to su to uid 0
37 *      are also logged there.
38 *
39 *      If su cannot create, open, or write entries into SULONG,
40 *      (or on the CONSOLE, if defined), the entry will not
41 *      be logged -- thus losing a record of the su's attempted
42 *      during this period.
43 */
44
45 #include <stdio.h>
46 #include <sys/types.h>
47 #include <sys/stat.h>
48 #include <sys/param.h>
49 #include <unistd.h>
50 #include <stdlib.h>
51 #include <crypt.h>
52 #include <pwd.h>
53 #include <shadow.h>
54 #include <time.h>
55 #include <signal.h>
56 #include <fcntl.h>
57 #include <string.h>
58 #include <locale.h>
59 #include <syslog.h>
60 #include <sys/utsname.h>
61 #include <sys/wait.h>
```

new/usr/src/cmd/su/su.c

2

```
62 #include <grp.h>
63 #include <deflt.h>
64 #include <limits.h>
65 #include <errno.h>
66 #include <stdarg.h>
67 #include <user_attr.h>
68 #include <priv.h>
69
70 #include <bsm/adt.h>
71 #include <bsm/adt_event.h>
72
73 #include <security/pam_appl.h>
74
75 #define PATH      "/usr/bin:"          /* path for users other than root */
76 #define SUPATH    "/usr/sbin:/usr/bin" /* path for root */
77 #define SUPRMT    "PS1=# "          /* primary prompt for root */
78 #define ELIM      128
79 #define ROOT      0
80 #ifndef DYNAMIC_SU
81 #define EMBEDDED_NAME "embedded_su"
82 #define DEF_ATTEMPTS 3              /* attempts to change password */
83 #endif /* DYNAMIC_SU */
84
85 #define PW_FALSE  1                /* no password change */
86 #define PW_TRUE   2                /* successful password change */
87 #define PW_FAILED 3                /* failed password change */
88
89 /*
90 * Intervals to sleep after failed su
91 */
92 #ifndef SLEEPTIME
93 #define SLEEPTIME 4
94 #endif
95
96 #define DEFAULT_LOGIN "/etc/default/login"
97 #define DEFFILE "/etc/default/su"
98
99 char      *Sulog, *Console;
100 char      *Path, *Supath;
101
102 /*
103 * Locale variables to be propagated to "su -" environment
104 */
105 static char *initvar;
106 static char *initenv[] = {
107     "TZ", "LANG", "LC_CTYPE",
108     "LC_NUMERIC", "LC_TIME", "LC_COLLATE",
109     "LC_MONETARY", "LC_MESSAGES", "LC_ALL", 0};
110 static char mail[30] = { "MAIL=/var/mail/" };
111
112 static void envalt(void);
113 static void log(char *, char *, int);
114 static void to(int);
115
116 enum messagemode { USAGE, ERR, WARN };
117 static void message(enum messagemode, char *, ...);
118
119 static char *alloc_vsprintf(const char *, va_list);
120 static char *tail(char *);
121
122 static void audit_success(int, struct passwd *);
123 static void audit_logout(ad_t_session_data_t *, au_event_t);
124 static void audit_failure(int, struct passwd *, char *, int);
125
126 #ifndef DYNAMIC_SU
```

```

128 static void validate(char *, int *);
129 static int legalenvvar(char *);
130 static int su_conv(int, struct pam_message **, struct pam_response **, void *);
131 static int emb_su_conv(int, struct pam_message **, struct pam_response **,
132     void *);
133 static void freeresponse(int, struct pam_response **response);
134 static struct pam_conv pam_conv = {su_conv, NULL};
135 static struct pam_conv emb_pam_conv = {emb_su_conv, NULL};
136 static void quotemsg(char *, ...);
137 static void readinitblock(void);
138 #else /* !DYNAMIC_SU */
139 static void update_audit(struct passwd *pwd);
140 #endif /* DYNAMIC_SU */

142 static pam_handle_t *pamh = NULL; /* Authentication handle */
143 struct passwd pwd;
144 char pwdbuf[1024]; /* buffer for getpwnam_r() */
145 char shell[] = "/usr/bin/sh"; /* default shell */
146 char safe_shell[] = "/sbin/sh"; /* "fallback" shell */
147 char su[PATH_MAX] = "su"; /* arg0 for exec of shprog */
148 char homedir[PATH_MAX] = "HOME=";
149 char logname[20] = "LOGNAME=";
150 char *suprmt = SUPRMT;
151 char termtyp[PATH_MAX] = "TERM=";
152 char *term;
153 char shelltyp[PATH_MAX] = "SHELL=";
154 char *hz;
155 char tznam[PATH_MAX];
156 char hzname[10] = "HZ=";
157 char path[PATH_MAX] = "PATH=";
158 char supath[PATH_MAX] = "PATH=";
159 char *envinit[ELIM];
160 extern char **environ;
161 char *tty;
162 char *username; /* the invoker */
163 static int dosyslog = 0; /* use syslog? */
164 char *myname;
165 #ifdef DYNAMIC_SU
166 int pam_flags = 0;
167 boolean_t embedded = B_FALSE;
168 #endif /* DYNAMIC_SU */

170 int
171 main(int argc, char **argv)
172 {
173     #ifndef DYNAMIC_SU
174     struct spwd sp;
175     char sdbuf[1024]; /* buffer for getspsnam_r() */
176     char *password;
177     #endif /* !DYNAMIC_SU */
178     char *nptr;
179     char *pshell;
180     int eflag = 0;
181     int envidx = 0;
182     uid_t uid;
183     gid_t gid;
184     char *dir, *shprog, *name;
185     char *ptr;
186     char *prog = argv[0];
187     #ifdef DYNAMIC_SU
188     int sleeptime = SLEEPTIME;
189     char **pam_env = 0;
190     int flags = 0;
191     int retcode;
192     int idx = 0;
193     #endif /* DYNAMIC_SU */

```

```

194     int pw_change = PW_FALSE;

196     (void) setlocale(LC_ALL, "");
197     #if !defined(TEXT_DOMAIN) /* Should be defined by cc -D */
198     #define TEXT_DOMAIN "SYS_TEST" /* Use this only if it wasn't */
199     #endif
200     (void) textdomain(TEXT_DOMAIN);

202     myname = tail(argv[0]);

204     #ifdef DYNAMIC_SU
205     if (strcmp(myname, EMBEDDED_NAME) == 0) {
206         embedded = B_TRUE;
207         setbuf(stdin, NULL);
208         setbuf(stdout, NULL);
209         readinitblock();
210     }
211     #endif /* DYNAMIC_SU */

213     if (argc > 1 && *argv[1] == '-') {
214         /* Explicitly check for just '-' (no trailing chars) */
215         if (strlen(argv[1]) == 1) {
216             eflag++; /* set eflag if '-' is specified */
217             argv++;
218             argc--;
219         } else {
220             message(USAGE,
221                 gettext("Usage: %s [-] [ username [ arg ... ] ]"),
222                 prog);
223             exit(1);
224         }
225     }

227     /*
228     * Determine specified userid, get their password file entry,
229     * and set variables to values in password file entry fields.
230     */
231     if (argc > 1) {
232         /*
233         * Usernames can't start with a '-', so we check for that to
234         * catch bad usage (like "su - -c ls").
235         */
236         if (*argv[1] == '-') {
237             message(USAGE,
238                 gettext("Usage: %s [-] [ username [ arg ... ] ]"),
239                 prog);
240             exit(1);
241         } else
242             nptr = argv[1]; /* use valid command-line username */
243     } else
244         nptr = "root"; /* use default "root" username */

246     if (defopen(DEFFILE) == 0) {

248         if (Sulog = defread("SULOG="))
249             Sulog = strdup(Sulog);
250         if (Console = defread("CONSOLE="))
251             Console = strdup(Console);
252         if (Path = defread("PATH="))
253             Path = strdup(Path);
254         if (Supath = defread("SUPATH="))
255             Supath = strdup(Supath);
256         if ((ptr = defread("SYSLOG=")) != NULL)
257             dosyslog = strcmp(ptr, "YES") == 0;

259     (void) defopen(NULL);

```

```

260     }
261     (void) strlcat(path, (Path) ? Path : PATH, sizeof (path));
262     (void) strlcat(supath, (Supath) ? Supath : SUPATH, sizeof (supath));

264     if ((ttyn = ttyname(0)) == NULL)
265         if ((ttyn = ttyname(1)) == NULL)
266             if ((ttyn = ttyname(2)) == NULL)
267                 ttyn = "/dev/???";
268     if ((username = cuserid(NULL)) == NULL)
269         username = "(null)";

271     /*
272     * if Sulog defined, create SULOLOG, if it does not exist, with
273     * mode read/write user. Change owner and group to root
274     */
275     if (Sulog != NULL) {
276         (void) close(open(Sulog, O_WRONLY | O_APPEND | O_CREAT,
277             (S_IRUSR|S_IWUSR)));
278         (void) chown(Sulog, (uid_t)ROOT, (gid_t)ROOT);
279     }

281 #ifdef DYNAMIC_SU
282     if (pam_start(embedded ? EMBEDDED_NAME : "su", nptr,
283         embedded ? &emb_pam_conv : &pam_conv, &pamh) != PAM_SUCCESS)
284         exit(1);
285     if (pam_set_item(pamh, PAM_TTY, ttyn) != PAM_SUCCESS)
286         exit(1);
287     if (getpwuid_r(getuid(), &pwd, pwdbuf, sizeof (pwdbuf)) == NULL ||
288         pam_set_item(pamh, PAM_AUSER, pwd.pw_name) != PAM_SUCCESS)
289         exit(1);
290 #endif /* DYNAMIC_SU */

292     openlog("su", LOG_CONS, LOG_AUTH);

294 #ifdef DYNAMIC_SU

296     /*
297     * Use the same value of sleeptime and password required that
298     * login(1) uses.
299     * This is obtained by reading the file /etc/default/login
300     * using the def*() functions
301     */
302     if (defopen(DEFAULT_LOGIN) == 0) {
303         if ((ptr = defread("SLEEPTIME=")) != NULL) {
304             sleeptime = atoi(ptr);
305             if (sleeptime < 0 || sleeptime > 5)
306                 sleeptime = SLEEPTIME;
307         }

309         if ((ptr = defread("PASSREQ=")) != NULL &&
310             strcmp(ptr, "YES") == 0)
311             pam_flags |= PAM_DISALLOW_NULL_AUTHTOK;

313         (void) defopen((char *)NULL);
314     }
315     /*
316     * Ignore SIGQUIT and SIGINT
317     */
318     (void) signal(SIGQUIT, SIG_IGN);
319     (void) signal(SIGINT, SIG_IGN);

321     /* call pam_authenticate() to authenticate the user through PAM */
322     if (getpwnam_r(nptr, &pwd, pwdbuf, sizeof (pwdbuf)) == NULL)
323         retcode = PAM_USER_UNKNOWN;
324     else if ((flags = (getuid() != (uid_t)ROOT)) != 0) {
325         retcode = pam_authenticate(pamh, pam_flags);

```

```

326     } else /* root user does not need to authenticate */
327         retcode = PAM_SUCCESS;

329     if (retcode != PAM_SUCCESS) {
330         /*
331         * 1st step: audit and log the error.
332         * 2nd step: sleep.
333         * 3rd step: print out message to user.
334         */
335         /* don't let audit_failure distinguish a role here */
336         audit_failure(PW_FALSE, NULL, nptr, retcode);
337         switch (retcode) {
338         case PAM_USER_UNKNOWN:
339             closelog();
340             (void) sleep(sleeptime);
341             message(ERR, gettext("Unknown id: %s"), nptr);
342             break;

344         case PAM_AUTH_ERR:
345             if (Sulog != NULL)
346                 log(Sulog, nptr, 0); /* log entry */
347             if (dosyslog)
348                 syslog(LOG_CRIT, "'su %s' failed for %s on %s",
349                     pwd.pw_name, username, ttyn);
350             closelog();
351             (void) sleep(sleeptime);
352             message(ERR, gettext("Sorry"));
353             break;

355         case PAM_CONV_ERR:
356         default:
357             if (dosyslog)
358                 syslog(LOG_CRIT, "'su %s' failed for %s on %s",
359                     pwd.pw_name, username, ttyn);
360             closelog();
361             (void) sleep(sleeptime);
362             message(ERR, gettext("Sorry"));
363             break;
364         }

366         (void) signal(SIGQUIT, SIG_DFL);
367         (void) signal(SIGINT, SIG_DFL);
368         exit(1);
369     }
370     if (flags)
371         validate(username, &pw_change);
372     if (pam_setcred(pamh, PAM_REINITIALIZE_CRED) != PAM_SUCCESS) {
373         message(ERR, gettext("unable to set credentials"));
374         exit(2);
375     }
376     if (dosyslog)
377         syslog(pwd.pw_uid == 0 ? LOG_NOTICE : LOG_INFO,
378             "'su %s' succeeded for %s on %s",
379             pwd.pw_name, username, ttyn);
380     closelog();
381     (void) signal(SIGQUIT, SIG_DFL);
382     (void) signal(SIGINT, SIG_DFL);
383 #else /* !DYNAMIC_SU */
384     if ((getpwnam_r(nptr, &pwd, pwdbuf, sizeof (pwdbuf)) == NULL) ||
385         (getspnam_r(nptr, &sp, spbuf, sizeof (spbuf)) == NULL)) {
386         message(ERR, gettext("Unknown id: %s"), nptr);
387         audit_failure(PW_FALSE, NULL, nptr, PAM_USER_UNKNOWN);
388         closelog();
389         exit(1);
390     }

```

```

392 /*
393  * Prompt for password if invoking user is not root or
394  * if specified(new) user requires a password
395  */
396 if (sp.sp_pwdp[0] == '\0' || getuid() == (uid_t)ROOT)
397     goto ok;
398 password = getpass(gettext("Password:"));

400 if ((strcmp(sp.sp_pwdp, crypt(password, sp.sp_pwdp)) != 0) {
401     /* clear password file entry */
402     (void) memset((void *)spbuf, 0, sizeof (spbuf));
403     if (Sulog != NULL)
404         log(Sulog, nptr, 0); /* log entry */
405     message(ERR, gettext("Sorry"));
406     audit_failure(PW_FALSE, NULL, nptr, PAM_AUTH_ERR);
407     if (dosyslog)
408         syslog(LOG_CRIT, "'su %s' failed for %s on %s",
409             pwd.pw_name, username, tty);
410     closelog();
411     exit(2);
412 }
413 /* clear password file entry */
414 (void) memset((void *)spbuf, 0, sizeof (spbuf));
415 ok:
416 /* update audit session in a non-pam environment */
417 update_audit(&pwd);
418 if (dosyslog)
419     syslog(pwd.pw_uid == 0 ? LOG_NOTICE : LOG_INFO,
420         "'su %s' succeeded for %s on %s",
421         pwd.pw_name, username, tty);
422 #endif /* DYNAMIC_SU */

424 audit_success(pw_change, &pwd);
425 uid = pwd.pw_uid;
426 gid = pwd.pw_gid;
427 dir = strdup(pwd.pw_dir);
428 shprog = strdup(pwd.pw_shell);
429 name = strdup(pwd.pw_name);

431 if (Sulog != NULL)
432     log(Sulog, nptr, 1); /* log entry */

434 /* set user and group ids to specified user */

436 /* set the real (and effective) GID */
437 if (setgid(gid) == -1) {
438     message(ERR, gettext("Invalid GID"));
439     exit(2);
440 }
441 /* Initialize the supplementary group access list. */
442 if (!nptr)
443     exit(2);
444 if (initgroups(nptr, gid) == -1) {
445     exit(2);
446 }
447 /* set the real (and effective) UID */
448 if (setuid(uid) == -1) {
449     message(ERR, gettext("Invalid UID"));
450     exit(2);
451 }

453 /*
454  * If new user's shell field is neither NULL nor equal to /usr/bin/sh,
455  * set:
456  *
457  *     pshell = their shell

```

```

458     *     su = [-]last component of shell's pathname
459     *
460     * Otherwise, set the shell to /usr/bin/sh and set argv[0] to '[-]su'.
461     */
462 if (shprog[0] != '\0' && strcmp(shell, shprog) != 0) {
463     char *p;

465     pshell = shprog;
466     (void) strcpy(su, eflag ? "-" : "");

468     if ((p = strrchr(pshell, '/')) != NULL)
469         (void) strlcat(su, p + 1, sizeof (su));
470     else
471         (void) strlcat(su, pshell, sizeof (su));
472 } else {
473     pshell = shell;
474     (void) strcpy(su, eflag ? "-su" : "su");
475 }

477 /*
478  * set environment variables for new user;
479  * arg0 for exec of shprog must now contain '-'
480  * so that environment of new user is given
481  */
482 if (eflag) {
483     int j;
484     char *var;

486     if (strlen(dir) == 0) {
487         (void) strcpy(dir, "/");
488         message(WARN, gettext("No directory! Using home=/"));
489     }
490     (void) strlcat(homedir, dir, sizeof (homedir));
491     (void) strlcat(logname, name, sizeof (logname));
492     if (hz = getenv("HZ"))
493         (void) strlcat(hzname, hz, sizeof (hzname));

495     (void) strlcat(shelltyp, pshell, sizeof (shelltyp));

497     if (chdir(dir) < 0) {
498         message(ERR, gettext("No directory!"));
499         exit(1);
500     }
501     envinit[envidx = 0] = homedir;
502     envinit[++envidx] = ((uid == (uid_t)ROOT) ? supath : path);
503     envinit[++envidx] = logname;
504     envinit[++envidx] = hzname;
505     if ((term = getenv("TERM")) != NULL) {
506         (void) strlcat(termtyp, term, sizeof (termtyp));
507         envinit[++envidx] = termtyp;
508     }
509     envinit[++envidx] = shelltyp;

511     (void) strlcat(mail, name, sizeof (mail));
512     envinit[++envidx] = mail;

514 /*
515  * Fetch the relevant locale/TZ environment variables from
516  * the inherited environment.
517  *
518  * We have a priority here for setting TZ. If TZ is set in
519  * in the inherited environment, that value remains top
520  * priority. If the file /etc/default/login has TIMEZONE set,
521  * that has second highest priority.
522  */
523     tznam[0] = '\0';

```

```

524     for (j = 0; initenv[j] != 0; j++) {
525         if (initvar = getenv(initenv[j])) {
527             /*
528              * Skip over values beginning with '/' for
529              * security.
530              */
531             if (initvar[0] == '/') continue;
533             if (strcmp(initenv[j], "TZ") == 0) {
534                 (void) strcpy(tzname, "TZ=");
535                 (void) strcat(tzname, initvar,
536                             sizeof (tzname));
538             } else {
539                 var = (char *)
540                     malloc(strlen(initenv[j])
541                             + strlen(initvar)
542                             + 2);
543                 if (var == NULL) {
544                     perror("malloc");
545                     exit(4);
546                 }
547                 (void) strcpy(var, initenv[j]);
548                 (void) strcat(var, "=");
549                 (void) strcat(var, initvar);
550                 envinit[++envidx] = var;
551             }
552         }
553     }
555     /*
556     * Check if TZ was found. If not then try to read it from
557     * /etc/default/login.
558     */
559     if (tzname[0] == '\0') {
560         if (defopen(DEFAULT_LOGIN) == 0) {
561             if (initvar = defread("TIMEZONE=")) {
562                 (void) strcpy(tzname, "TZ=");
563                 (void) strcat(tzname, initvar,
564                             sizeof (tzname));
565             }
566             (void) defopen(NULL);
567         }
568     }
570     if (tzname[0] != '\0')
571         envinit[++envidx] = tzname;
573 #ifdef DYNAMIC_SU
574     /*
575     * set the PAM environment variables -
576     * check for legal environment variables
577     */
578     if ((pam_env = pam_getenvlist(pamh)) != 0) {
579         while (pam_env[idx] != 0) {
580             if (envidx + 2 < ELIM &&
581                 legalenvvar(pam_env[idx])) {
582                 envinit[++envidx] = pam_env[idx];
583             }
584             idx++;
585         }
586     }
587 #endif /* DYNAMIC_SU */
588     envinit[++envidx] = NULL;
589     environ = envinit;

```

```

590     } else {
591         char **pp = environ, **qq, *p;
593         while ((p = *pp) != NULL) {
594             if (*p == 'L' && p[1] == 'D' && p[2] == '_' ) {
595                 for (qq = pp; (*qq = qq[1]) != NULL; qq++)
596                     ;
597                 /* pp is not advanced */
598             } else {
599                 pp++;
600             }
601         }
602     }
604 #ifdef DYNAMIC_SU
605     if (pamh)
606         (void) pam_end(pamh, PAM_SUCCESS);
607 #endif /* DYNAMIC_SU */
609     /*
610     * if new user is root:
611     *   if CONSOLE defined, log entry there;
612     *   if eflag not set, change environment to that of root.
613     */
614     if (uid == (uid_t)ROOT) {
615         if (Console != NULL)
616             if (strcmp(ttyn, Console) != 0) {
617                 (void) signal(SIGALRM, to);
618                 (void) alarm(30);
619                 log(Console, nptr, 1);
620                 (void) alarm(0);
621             }
622         if (!eflag)
623             envalt();
624     }
626     /*
627     * Default for SIGCPU and SIGXFSZ. Shells inherit
628     * signal disposition from parent. And the
629     * shells should have default dispositions for these
630     * signals.
631     */
632     (void) signal(SIGXCPU, SIG_DFL);
633     (void) signal(SIGXFSZ, SIG_DFL);
635 #ifdef DYNAMIC_SU
636     if (embedded) {
637         (void) puts("SUCCESS");
638         /*
639         * After this point, we're no longer talking the
640         * embedded_su protocol, so turn it off.
641         */
642         embedded = B_FALSE;
643     }
644 #endif /* DYNAMIC_SU */
646     /*
647     * if additional arguments, exec shell program with array
648     * of pointers to arguments:
649     *   -> if shell = default, then su = [-]su
650     *   -> if shell != default, then su = [-]last component of
651     *       shell's pathname
652     *
653     * if no additional arguments, exec shell with arg0 of su
654     * where:
655     *   -> if shell = default, then su = [-]su

```

```
656     *      -> if shell != default, then su = [-]last component of
657     *      shell's pathname
658     */
659     if (argc > 2) {
660         argv[1] = su;
661         (void) execv(pshell, &argv[1]);
662     } else
663         (void) execl(pshell, su, 0);

666     /*
667     * Try to clean up after an administrator who has made a mistake
668     * configuring root's shell; if root's shell is other than /sbin/sh,
669     * try exec'ing /sbin/sh instead.
670     */
671     if ((uid == (uid_t)ROOT) && (strcmp(name, "root") == 0) &&
672         (strcmp(safe_shell, pshell) != 0)) {
673         message(WARN,
674             gettext("No shell %s. Trying fallback shell %s."),
675             pshell, safe_shell);

677         if (eflag) {
678             (void) strcpy(su, "-sh");
679             (void) strcpy(shelltyp + strlen("SHELL="),
680                 safe_shell, sizeof (shelltyp) - strlen("SHELL="));
681         } else {
682             (void) strcpy(su, "sh");
683         }

685         if (argc > 2) {
686             argv[1] = su;
687             (void) execv(safe_shell, &argv[1]);
688         } else {
689             (void) execl(safe_shell, su, 0);
690         }
691         message(ERR, gettext("Couldn't exec fallback shell %s: %s"),
692             safe_shell, strerror(errno));
693     } else {
694         message(ERR, gettext("No shell"));
695     }
696     return (3);
697 }
```

unchanged portion omitted

new/usr/src/lib/pam_modules/Makefile

1

```
*****
1584 Wed Sep 17 00:13:23 2014
new/usr/src/lib/pam_modules/Makefile
5110 want pam_timestamp module
*****
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 # Copyright 2009 Sun Microsystems, Inc. All rights reserved.
23 # Use is subject to license terms.
24 #
25 # Copyright 2014 Nexenta Systems, Inc.
26 #
27 # lib/pam_modules/Makefile
28 #

30 include $(SRC)/Makefile.master

32 SUBDIRS = \
33     allow \
34     authtok_get \
35     authtok_check \
36     authtok_store \
37     deny \
38     dhkeys \
39     dial_auth \
40     krb5 \
41     krb5_migrate \
42     ldap \
43     list \
44     passwd_auth \
45     rhosts_auth \
46     roles \
47     sample \
48     smb \
49     smbfs \
50     timestamp \
51     tsol_acct \
52     unix_auth \
53     unix_account \
54     unix_cred \
55     unix_session

57 all := TARGET= all
58 catalog := TARGET= _msg
59 clean := TARGET= clean
60 clobber := TARGET= clobber
61 install := TARGET= install
```

new/usr/src/lib/pam_modules/Makefile

2

```
62 lint := TARGET= lint
63 _msg := TARGET= _msg

65 .KEEP_STATE:

67 all clean clobber install lint _msg: $(SUBDIRS)

69 $(SUBDIRS): FRC
70     @cd $@; pwd; $(MAKE) $(TARGET)

72 FRC:
```

new/usr/src/lib/pam_modules/timestamp/Makefile

1

930 Wed Sep 17 00:13:23 2014

new/usr/src/lib/pam_modules/timestamp/Makefile

5110 want pam_timestamp module

```
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 at
9 # http://www.illumos.org/license/CDDL.
10 #
11 # Copyright 2014 Nexenta Systems, Inc.
12 #
13
14 include      ../../Makefile.lib
15
16 TEXT_DOMAIN= SUNW_OST_SYSOSPAM
17 POFILE=      pam_timestamp.po
18 MSGFILES=    pam_timestamp.c
19
20 SUBDIRS=     $(MACH)
21 $(BUILD64)SUBDIRS += $(MACH64)
22
23 all :=       TARGET= all
24 clean :=     TARGET= clean
25 clobber :=   TARGET= clobber
26 install :=   TARGET= install
27 lint :=      TARGET= lint
28
29 .KEEP_STATE:
30
31 all clean clobber install lint: $(SUBDIRS)
32
33 _msg:        $(MSGDOMAINPOFILE)
34
35 $(SUBDIRS): FRC
36 @cd $@; pwd; $(MAKE) $(TARGET)
37
38 FRC:
39
40 include      $(SRC)/Makefile.msg.targ
41 include      ../../Makefile.targ
```


new/usr/src/lib/pam_modules/timestamp/Makefile.com

1

686 Wed Sep 17 00:13:23 2014

new/usr/src/lib/pam_modules/timestamp/Makefile.com

5110 want pam_timestamp module

```
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 at
9 # http://www.illumos.org/license/CDDL.
10 #
11 # Copyright 2014 Nexenta Systems, Inc.
12 #
13 #
14 #
15 # usr/src/lib/pam_modules/pam_timestamp/Makefile.com
16 #
17 #
18 LIBRARY=      pam_timestamp.a
19 VERS=        .1
20 OBJECTS=     pam_timestamp.o
21 #
22 include      ../../Makefile.pam_modules
23 #
24 LDLIBS +=    -lpam -lc
25 #
26 all:        $(LIBS)
27 #
28 lint:       lintcheck
29 #
30 include $(SRC)/lib/Makefile.targ
```

new/usr/src/lib/pam_modules/timestamp/amd64/Makefile

1

544 Wed Sep 17 00:13:23 2014

new/usr/src/lib/pam_modules/timestamp/amd64/Makefile

5110 want pam_timestamp module

```
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 at
9 # http://www.illumos.org/license/CDDL.
10 #
11 # Copyright 2014 Nexenta Systems, Inc.
12 #
13
14 include ../Makefile.com
15 include ../../../../Makefile.lib.64
16
17 install: all $(ROOTLIBS64) $(ROOTLINKS64)
```

```
new/usr/src/lib/pam_modules/timestamp/i386/Makefile
```

1

```
*****
```

```
566 Wed Sep 17 00:13:23 2014
```

```
new/usr/src/lib/pam_modules/timestamp/i386/Makefile
```

```
5110 want pam_timestamp module
```

```
*****
```

```
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 at
9 # http://www.illumos.org/license/CDDL.
10 #
11 # Copyright 2014 Nexenta Systems, Inc.
12 #
13 #
14 #
15 # usr/src/lib/pam_modules/pam_timestamp/i386/Makefile
16 #
17 #
18 include ../Makefile.com
19 #
20 install: all $(ROOTLIBS) $(ROOTLINKS)
```

new/usr/src/lib/pam_modules/timestamp/mapfile-vers

1

911 Wed Sep 17 00:13:23 2014

new/usr/src/lib/pam_modules/timestamp/mapfile-vers

5110 want pam_timestamp module

```
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 at
9 # http://www.illumos.org/license/CDDL.
10 #
11 # Copyright 2014 Nexenta Systems, Inc.
12 #
13 #
14 #
15 # MAPFILE HEADER START
16 #
17 # WARNING: STOP NOW. DO NOT MODIFY THIS FILE.
18 # Object versioning must comply with the rules detailed in
19 #
20 #     usr/src/lib/README.mapfiles
21 #
22 # You should not be making modifications here until you've read the most current
23 # copy of that file. If you need help, contact a gatekeeper for guidance.
24 #
25 # MAPFILE HEADER END
26 #
27 #
28 $mapfile_version 2
29 #
30 SYMBOL_VERSION ILLUMOS_0.1 {
31     global:
32         pam_sm_authenticate;
33         pam_sm_setcred;
34     local:
35         *;
36 };
```

```

*****
10472 Wed Sep 17 00:13:23 2014
new/usr/src/lib/pam_modules/timestamp/pam_timestamp.c
5110 want pam_timestamp module
*****
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 at
9  * http://www.illumos.org/license/CDDL.
10 */
11 /*
12  * Copyright 2014 Nexenta Systems, Inc.
13  */
14
15 #include <stdio.h>
16 #include <stdlib.h>
17 #include <strings.h>
18 #include <fcntl.h>
19 #include <security/pam_appl.h>
20 #include <security/pam_modules.h>
21 #include <security/pam_impl.h>
22 #include <sys/param.h>
23 #include <sys/stat.h>
24 #include <sys/types.h>
25 #include <syslog.h>
26 #include <unistd.h>
27 #include <libgen.h>
28 #include <errno.h>
29
30 #define TIMESTAMP_DIR      "/var/run/tty_timestamps"
31 #define TIMESTAMP_TIMEOUT  5 /* default timeout */
32 #define ROOT_UID          0 /* root uid */
33 #define ROOT_GID          0 /* root gid */
34
35 struct user_info {
36     dev_t dev;           /* ID of device tty resides on */
37     dev_t rdev;         /* tty device ID */
38     ino_t ino;          /* tty inode number */
39     uid_t uid;          /* user's uid */
40     pid_t ppid;         /* parent pid */
41     pid_t sid;          /* session ID associated with tty/ppid */
42     time_t ts;          /* time of tty last status change */
43 };
44
45 int debug = 0;
46
47 int
48 validate_basic(
49     pam_handle_t      *pamh,
50     char               *user_tty,
51     char               *timestampfile)
52 {
53     char               *user;
54     char               *auser;
55     char               *ttyn;
56
57     /* get user, auser and user's tty */
58     (void) pam_get_item(pamh, PAM_USER, (void **)&user);
59     (void) pam_get_item(pamh, PAM_AUSER, (void **)&auser);
60     (void) pam_get_item(pamh, PAM_TTY, (void **)&ttyn);

```

```

62     if (user == NULL || *user == '\0') {
63         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
64             "PAM_USER NULL or empty");
65         return (PAM_IGNORE);
66     }
67
68     if (auser == NULL || *auser == '\0') {
69         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
70             "PAM_AUSER NULL or empty");
71         return (PAM_IGNORE);
72     }
73
74     if (ttyn == NULL || *ttyn == '\0') {
75         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
76             "PAM_TTY NULL or empty");
77         return (PAM_IGNORE);
78     }
79
80     if (debug)
81         syslog(LOG_AUTH | LOG_DEBUG, "pam_timestamp: "
82             "user = %s, auser = %s, tty = %s", user, auser, ttyn);
83
84     (void) strncpy(user_tty, ttyn, MAXPATHLEN);
85
86     if (strchr(ttyn, '/') == NULL || strncmp(ttyn, "/dev/", 5) == 0) {
87         ttyn = strrchr(ttyn, '/') + 1;
88     } else {
89         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
90             "invalid tty: %s", ttyn);
91         return (PAM_IGNORE);
92     }
93
94     /* format timestamp file name */
95     (void) snprintf(timestampfile, MAXPATHLEN, "%s/%s/%s:%s",
96         TIMESTAMP_DIR, auser, ttyn, user);
97
98     return (PAM_SUCCESS);
99 }
100
101 int
102 validate_dir(const char *dir)
103 {
104     struct stat sb;
105
106     /*
107      * check that the directory exist and has
108      * right owner and permissions.
109      */
110     if (lstat(dir, &sb) < 0) {
111         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
112             "directory %s does not exist", dir);
113         return (PAM_IGNORE);
114     }
115
116     if (!S_ISDIR(sb.st_mode)) {
117         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
118             "%s is not a directory", dir);
119         return (PAM_IGNORE);
120     }
121
122     if (S_ISLNK(sb.st_mode)) {
123         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
124             "%s is a symbolic link", dir);
125         return (PAM_IGNORE);
126     }

```

```

128     if (sb.st_uid != 0 || sb.st_gid != 0) {
129         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
130             "%s is not owned by root", dir);
131         return (PAM_IGNORE);
132     }
133
134     if (sb.st_mode & (S_IWGRP | S_IWOTH | S_IROTH)) {
135         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
136             "%s has wrong permissions", dir);
137         return (PAM_IGNORE);
138     }
139
140     return (PAM_SUCCESS);
141 }
142
143 int
144 create_dir(char *dir)
145 {
146     /*
147      * create directory if it doesn't exist and attempt to set
148      * the owner to root.
149      */
150     if (mkdir(dir, S_IRWXU) < 0) {
151         if (errno != EEXIST) {
152             syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
153                 "can't create directory %s", dir);
154             return (PAM_IGNORE);
155         }
156     } else if (lchown(dir, ROOT_UID, ROOT_GID) < 0) {
157         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
158             "can't set permissions on directory %s", dir);
159         return (PAM_IGNORE);
160     }
161     return (PAM_SUCCESS);
162 }
163
164 /*
165  * pam_sm_authenticate
166  *
167  * Read authentication from user, using cached successful authentication
168  * attempts.
169  *
170  * returns PAM_SUCCESS on success, otherwise always returns PAM_IGNORE:
171  * while this module has "sufficient" control value, in case of any failure
172  * user will be authenticated with the pam_unix_auth module.
173  * options -
174  *     debug
175  *     timeout=      timeout in min, default is 5
176  */
177 /*ARGSUSED*/
178 int
179 pam_sm_authenticate(
180     pam_handle_t    *pamh,
181     int             flags,
182     int             argc,
183     const char     **argv)
184 {
185     struct          user_info info;
186     struct          stat sb, tty;
187     time_t         timeout = 0;
188     long           tmp = 0;
189     int            result = PAM_IGNORE;
190     int            i;
191     int            fd = -1;
192     char           *p;
193     char           user_tty[MAXPATHLEN];

```

```

194     char           timestampdir[MAXPATHLEN];
195     char           timestampfile[MAXPATHLEN];
196     char           *sudir;
197
198     timeout = TIMESTAMP_TIMEOUT;
199
200     /* check options passed to this module */
201     for (i = 0; i < argc; i++) {
202         if (strcmp(argv[i], "debug") == 0) {
203             debug = 1;
204         } else if (strncmp(argv[i], "timeout=", 8) == 0) {
205             tmp = strtol(argv[i] + 8, &p, 0);
206             if ((p != NULL) && (*p == '\0') && tmp > 0) {
207                 timeout = tmp;
208             }
209         }
210     }
211
212     if (validate_basic(pamh, user_tty, timestampfile) != PAM_SUCCESS)
213         return (result);
214
215     sudir = TIMESTAMP_DIR;
216     if (validate_dir(sudir) != PAM_SUCCESS)
217         return (result);
218
219     (void) strncpy(timestampdir, timestampfile, MAXPATHLEN);
220
221     if (validate_dir(dirname(timestampdir)) != PAM_SUCCESS)
222         return (result);
223
224     /*
225      * check that timestamp file is exist and has right owner
226      * and permissions.
227      */
228     if (lstat(timestampfile, &sb) == 0 && sb.st_size != 0) {
229         if (IS_ISREG(sb.st_mode)) {
230             (void) unlink(timestampfile);
231             syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
232                 "timestamp file %s is not a regular file",
233                 timestampfile);
234             return (result);
235         }
236     }
237
238     if (sb.st_uid != 0 || sb.st_gid != 0) {
239         (void) unlink(timestampfile);
240         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
241             "timestamp file %s is not owned by root",
242             timestampfile);
243         return (result);
244     }
245
246     if (sb.st_nlink != 1 || S_ISLNK(sb.st_mode)) {
247         (void) unlink(timestampfile);
248         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
249             "timestamp file %s is a symbolic link",
250             timestampfile);
251         return (result);
252     }
253
254     if (sb.st_mode & (S_IRWXG | S_IRWXO)) {
255         (void) unlink(timestampfile);
256         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
257             "timestamp file %s has wrong permissions",
258             timestampfile);
259         return (result);
260     }

```

```

260     } else {
261         if (debug)
262             syslog(LOG_AUTH | LOG_DEBUG, "pam_timestamp: "
263                 "timestamp file %s does not exist: %m",
264                 timestampfile);
265         return (result);
266     }

269     if (stat(user_tty, &tty) < 0) {
270         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
271             "can't stat tty: %m");
272         return (result);
273     }

275     if ((fd = open(timestampfile, O_RDONLY)) < 0) {
276         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
277             "can't open timestamp file %s for reading: %m",
278             timestampfile);
279         return (result);
280     }

282     if (read(fd, &info, sizeof (info)) != sizeof (info)) {
283         (void) close(fd);
284         (void) unlink(timestampfile);
285         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
286             "timestamp file '%s' is corrupt: %m", timestampfile);
287         return (result);
288     }

290     if (info.dev != tty.st_dev || info.ino != tty.st_ino ||
291         info.rdev != tty.st_rdev || info.sid != getsid(getpid()) ||
292         info.uid != getuid() || info.ts.tv_sec != tty.st_ctim.tv_sec ||
293         info.ts.tv_nsec != tty.st_ctim.tv_nsec) {
294         (void) close(fd);
295         (void) unlink(timestampfile);
296         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
297             "the content of the timestamp file '%s' is not valid",
298             timestampfile);
299         return (result);
300     }

302     if (time((time_t *)0) - sb.st_mtime > 60 * timeout) {
303         (void) unlink(timestampfile);
304         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
305             "timestamp file '%s' has expired, disallowing access",
306             timestampfile);
307         return (result);
308     } else {
309         if (debug)
310             syslog(LOG_AUTH | LOG_DEBUG, "pam_timestamp: "
311                 "timestamp file %s is not expired, "
312                 "allowing access ", timestampfile);
313         result = PAM_SUCCESS;
314     }

316     return (result);
317 }

319 /*
320  * pam_sm_setcred
321  *
322  * Creates timestamp directory and writes
323  * timestamp file if it doesn't exist.
324  *
325  * returns PAM_SUCCESS on success, otherwise PAM_IGNORE

```

```

326  */
327  /*ARGSUSED*/
328  int
329  pam_sm_setcred(
330      pam_handle_t      *pamh,
331      int                flags,
332      int                argc,
333      const char        **argv)
334  {
335      struct             stat sb;
336      struct             stat tty;
337      struct             user_info info;
338      int                result = PAM_IGNORE;
339      int                fd = -1;
340      char               user_tty[MAXPATHLEN];
341      char               timestampdir[MAXPATHLEN];
342      char               timestampfile[MAXPATHLEN];

344      /* validate flags */
345      if (flags && !(flags & PAM_ESTABLISH_CRED) &&
346          !(flags & PAM_REINITIALIZE_CRED) &&
347          !(flags & PAM_REFRESH_CRED) &&
348          !(flags & PAM_DELETE_CRED) &&
349          !(flags & PAM_SILENT)) {
350          syslog(LOG_ERR, "pam_timestamp: illegal flag %d", flags);
351          return (result);
352      }

354      if (validate_basic(pamh, user_tty, timestampfile) != PAM_SUCCESS)
355          return (result);

357      /*
358       * user doesn't need to authenticate for PAM_DELETE_CRED
359       */
360      if (flags & PAM_DELETE_CRED) {
361          (void) unlink(timestampfile);
362          return (result);
363      }

365      /* if the timestamp file exist, there is nothing to do */
366      if (lstat(timestampfile, &sb) == 0) {
367          if (debug)
368              syslog(LOG_AUTH | LOG_DEBUG, "pam_timestamp: "
369                  "timestamp file %s is not expired", timestampfile);
370          return (result);
371      }

373      if (create_dir(TIMESTAMP_DIR) != PAM_SUCCESS)
374          return (result);

376      (void) strcpy(timestampdir, timestampfile, MAXPATHLEN);

378      if (create_dir(dirname(timestampdir)) != PAM_SUCCESS)
379          return (result);

381      if (stat(user_tty, &tty) < 0) {
382          syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
383              "can't stat tty: %m");
384          return (result);
385      }

387      info.dev = tty.st_dev;
388      info.ino = tty.st_ino;
389      info.rdev = tty.st_rdev;
390      info.sid = getsid(getpid());
391      info.uid = getuid();

```

```
392     info.ts = tty.st_ctim;
394     if ((fd = open(timestampfile, O_WRONLY|O_CREAT, S_IRUSR|S_IWUSR)) < 0) {
395         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
396             "can't open timestamp file %s for writing: %m",
397             timestampfile);
398         return (result);
399     } else if (fchown(fd, ROOT_UID, ROOT_GID) != 0) {
400         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
401             "can't set permissions on timestamp file %s: %m",
402             timestampfile);
403         (void) close(fd);
404         return (result);
405     }
407     if (write(fd, &info, sizeof (info)) != sizeof (info)) {
408         (void) close(fd);
409         syslog(LOG_AUTH | LOG_ERR, "pam_timestamp: "
410             "can't write timestamp file %s: %m", timestampfile);
411         return (result);
412     }
413     (void) close(fd);
415     return (PAM_SUCCESS);
416 }
```



```
new/usr/src/lib/pam_modules/timestamp/sparc/Makefile
```

1

```
*****
```

```
567 Wed Sep 17 00:13:23 2014
```

```
new/usr/src/lib/pam_modules/timestamp/sparc/Makefile
```

```
5110 want pam_timestamp module
```

```
*****
```

```
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 at
9 # http://www.illumos.org/license/CDDL.
10 #
11 # Copyright 2014 Nexenta Systems, Inc.
12 #
13 #
14 #
15 # usr/src/lib/pam_modules/pam_timestamp/sparc/Makefile
16 #
17 #
18 include ../Makefile.com
19 #
20 install: all $(ROOTLIBS) $(ROOTLINKS)
```

new/usr/src/lib/pam_modules/timestamp/sparcv9/Makefile

1

606 Wed Sep 17 00:13:23 2014

new/usr/src/lib/pam_modules/timestamp/sparcv9/Makefile

5110 want pam_timestamp module

```
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 at
9 # http://www.illumos.org/license/CDDL.
10 #
11 # Copyright 2014 Nexenta Systems, Inc.
12 #
13 #
14 #
15 # usr/src/lib/pam_modules/pam_timestamp/sparcv9/Makefile
16 #
17 #
18 include ../Makefile.com
19 include ../../../../Makefile.lib.64
20 #
21 install: all $(ROOTLIBS64) $(ROOTLINKS64)
```

```

*****
4046 Wed Sep 17 00:13:23 2014
new/usr/src/man/man5/Makefile
5110 want pam_timestamp module
*****
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 #
12 #
13 # Copyright 2011, Richard Lowe
14 # Copyright (c) 2012 by Delphix. All rights reserved.
15 # Copyright 2014 Nexenta Systems, Inc.
16 # Copyright 2013 Nexenta Systems, Inc. All rights reserved.
17 # Copyright 2014 Garrett D'Amore <garrett@damore.org>
17 #
19 include $(SRC)/Makefile.master
21 MANSECT= 5
23 MANFILES= Intro.5 //
24 acl.5 //
25 ad.5 //
26 ascii.5 //
27 attributes.5 //
28 audit_binfile.5 //
29 audit_remote.5 //
30 audit_syslog.5 //
31 brands.5 //
32 cancellation.5 //
33 charmap.5 //
34 condition.5 //
35 crypt_bsdbsf.5 //
36 crypt_bsdmd5.5 //
37 crypt_sha256.5 //
38 crypt_sha512.5 //
39 crypt_sunmd5.5 //
40 crypt_unix.5 //
41 device_clean.5 //
42 dhcp.5 //
43 dhcp_modules.5 //
44 environ.5 //
45 eqn.5 //
46 eqnchar.5 //
47 extendedFILE.5 //
48 filesystem.5 //
49 fnmatch.5 //
50 formats.5 //
51 fsattr.5 //
52 grub.5 //
53 gss_auth_rules.5 //
54 hal.5 //
55 iconv.5 //
56 iconv_unicode.5 //
57 ieee802.3.5 //
58 ieee802.11.5 //
59 ipfilter.5 //
60 isalist.5 //

```

```

61 kerberos.5 //
62 krb5_auth_rules.5 //
63 krb5envvar.5 //
64 largefile.5 //
65 lf64.5 //
66 lfcompile.5 //
67 lfcompile64.5 //
68 locale.5 //
69 man.5 //
70 mandoc_char.5 //
71 mandoc_roff.5 //
72 mdoc.5 //
73 me.5 //
74 mech_spnego.5 //
75 mm.5 //
76 ms.5 //
77 mutex.5 //
78 nfssec.5 //
79 pam_allow.5 //
80 pam_authtok_check.5 //
81 pam_authtok_get.5 //
82 pam_authtok_store.5 //
83 pam_deny.5 //
84 pam_dhkeys.5 //
85 pam_dial_auth.5 //
86 pam_krb5.5 //
87 pam_krb5_migrate.5 //
88 pam_ldap.5 //
89 pam_list.5 //
90 pam_passwd_auth.5 //
91 pam_rhosts_auth.5 //
92 pam_roles.5 //
93 pam_sample.5 //
94 pam_smb_passwd.5 //
95 pam_smbfs_login.5 //
96 pam_timestamp.5 //
97 pam_tsol_account.5 //
98 pam_unix_account.5 //
99 pam_unix_auth.5 //
100 pam_unix_cred.5 //
101 pam_unix_session.5 //
102 pkcs11_kernel.5 //
103 pkcs11_softtoken.5 //
104 pkcs11_tpm.5 //
105 privileges.5 //
106 prof.5 //
107 rbac.5 //
108 regex.5 //
109 regexp.5 //
110 resource_controls.5 //
111 smf.5 //
112 smf_bootstrap.5 //
113 smf_method.5 //
114 smf_restarter.5 //
115 smf_security.5 //
116 smf_template.5 //
117 standards.5 //
118 sticky.5 //
119 tbl.5 //
120 tecla.5 //
121 term.5 //
122 threads.5 //
123 trusted_extensions.5 //
124 vgrindfs.5 //
125 zones.5 //
126 zpool-features.5 //

```

```

128 MANLINKS=      ANSI.5      \|
129                C++.5       \|
130                C.5         \|
131                CSI.5        \|
132                ISO.5        \|
133                MT-Level.5   \|
134                POSIX.1.5    \|
135                POSIX.2.5    \|
136                POSIX.5      \|
137                RBAC.5       \|
138                SUS.5        \|
139                SUSv2.5      \|
140                SUSv3.5      \|
141                SVID.5       \|
142                SVID3.5      \|
143                XNS.5        \|
144                XNS4.5       \|
145                XNS5.5       \|
146                XPG.5        \|
147                XPG3.5       \|
148                XPG4.5       \|
149                XPG4v2.5     \|
150                advance.5    \|
151                architecture.5 \|
152                availability.5 \|
153                compile.5    \|
154                intro.5      \|
155                pthreads.5   \|
156                stability.5  \|
157                standard.5   \|
158                step.5       \|
159                teclarc.5    \|

161 intro.5        := LINKSRC = Intro.5

163 CSI.5          := LINKSRC = attributes.5
164 MT-Level.5     := LINKSRC = attributes.5
165 architecture.5 := LINKSRC = attributes.5
166 availability.5 := LINKSRC = attributes.5
167 stability.5    := LINKSRC = attributes.5
168 standard.5     := LINKSRC = attributes.5

170 RBAC.5        := LINKSRC = rbac.5

172 advance.5     := LINKSRC = regexp.5
173 compile.5     := LINKSRC = regexp.5
174 step.5        := LINKSRC = regexp.5

176 ANSI.5        := LINKSRC = standards.5
177 C++.5         := LINKSRC = standards.5
178 C.5           := LINKSRC = standards.5
179 ISO.5         := LINKSRC = standards.5
180 POSIX.1.5     := LINKSRC = standards.5
181 POSIX.2.5     := LINKSRC = standards.5
182 POSIX.5       := LINKSRC = standards.5
183 SUS.5         := LINKSRC = standards.5
184 SUSv2.5       := LINKSRC = standards.5
185 SUSv3.5       := LINKSRC = standards.5
186 SVID.5        := LINKSRC = standards.5
187 SVID3.5       := LINKSRC = standards.5
188 XNS.5         := LINKSRC = standards.5
189 XNS4.5        := LINKSRC = standards.5
190 XNS5.5        := LINKSRC = standards.5
191 XPG.5         := LINKSRC = standards.5
192 XPG3.5        := LINKSRC = standards.5

```

```

193 XPG4.5        := LINKSRC = standards.5
194 XPG4v2.5      := LINKSRC = standards.5

196 teclarc.5    := LINKSRC = tecla.5

198 pthreads.5   := LINKSRC = threads.5

200 .KEEP_STATE:

202 include       $(SRC)/man/Makefile.man

204 install:     $(ROOTMANFILES) $(ROOTMANLINKS)

```

new/usr/src/man/man5/pam_timestamp.5

1

2908 Wed Sep 17 00:13:24 2014

new/usr/src/man/man5/pam_timestamp.5

5110 want pam_timestamp module

```
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 at
9 .\" http://www.illumos.org/license/CDDL.
10 .\"
11 .\" Copyright 2014 Nexenta Systems, Inc.
12 .\"
13 .Dd Aug 20, 2014
14 .Dt PAM_TIMESTAMP 5
15 .Os
16 .Sh NAME
17 .Nm pam_timestamp
18 .Nd PAM authentication module using cached successful
19 authentication attempts
20 .Sh SYNOPSIS
21 .Nm pam_timestamp.so.1
22 .Op Ar debug
23 .Op Ar timeout=min
24 .Sh DESCRIPTION
25 The
26 .Nm
27 module caches successful tty-based authentication attempts by
28 creating user's directories and per tty timestamp files in the
29 common timestamp directory
30 .Pa /var/run/tty_timestamps .
31 Next authentication, if the timestamp file exist and not expired,
32 the user will not be asked for a password, otherwise timestamp
33 file will be deleted and user will be prompted to enter a password.
34 .Lp
35 The PAM items
36 .Dv PAM_USER ,
37 .Dv PAM_AUSER
38 and
39 .Dv PAM_TTY
40 are used by this module.
41 .Sy pam_timestamp
42 is normally configured as
43 .Sy sufficient
44 and must be used in conjunction with the modules that support
45 the UNIX authentication, which are
46 .Xr pam_authtok_get 5 ,
47 .Xr pam_unix_cred 5
48 and
49 .Xr pam_unix_auth 5 .
50 Proper authentication operation requires
51 .Xr pam_unix_cred 5
52 be stacked above
53 .Xr pam_timestamp .
54 .Sh OPTIONS
55 .Bl -tag -width Ds
56 .It Dv debug
57 Provides
58 .Xr syslog 3
59 debugging information at the
60 .Sy LOG_AUTH | LOG_DEBUG
61 level.
```

new/usr/src/man/man5/pam_timestamp.5

2

```
62 .It Dv timeout
63 Specifies the period (in minutes) for which the timestamp
64 file is valid. The default value is 5 minutes.
65 .El
66 .Sh FILES
67 .Bl -tag -width indent
68 .It Pa /var/run/tty_timestamps/...
69 stores timestamp directories and files
70 .El
71 .Sh EXIT STATUS
72 .Bl -tag -width Ds
73 .It Dv PAM_SUCCESS
74 Timestamp file is not expired.
75 .It Dv PAM_IGNORE
76 The
77 .Nm
78 module was not able to retrieve required credentials
79 or timestamp file is expired or corrupt.
80 .El
81 .Sh EXAMPLES
82 .Ss Example 1 Allowing su authentication
83 .
84 The following example is a
85 .Xr pam.conf 4
86 fragment that illustrates a default settings for allowing
87 .Xr su 1M
88 authentication:
89 .Bd -literal -offset indent
90 su auth required pam_unix_cred.so.1
91 su auth sufficient pam_timestamp.so.1
92 su auth requisite pam_authtok_get.so.1
93 su auth required pam_unix_auth.so.1
94 .Ed
95 .Ss Example 2 Changing default timeout
96 .
97 The default timeout set to 10 minutes:
98 .Bd -literal -offset indent
99 su auth required pam_unix_cred.so.1
100 su auth sufficient pam_timestamp.so.1 timeout=10
101 su auth requisite pam_authtok_get.so.1
102 su auth required pam_unix_auth.so.1
103 .Ed
104 .Sh INTERFACE STABILITY
105 .Sy Uncommitted .
106 .Sh MT LEVEL
107 .Sy MT-Safe .
108 .Sh SEE ALSO
109 .Xr su 1M ,
110 .Xr pam 3PAM ,
111 .Xr pam_sm_authenticate 3PAM ,
112 .Xr pam_sm_setcred 3PAM ,
113 .Xr pam.conf 4 ,
114 .Xr syslog 3C
```

new/usr/src/pkg/manifests/system-library.man5.inc

1

2710 Wed Sep 17 00:13:24 2014

new/usr/src/pkg/manifests/system-library.man5.inc

5110 want pam_timestamp module

```
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 #
```

```
12 #
13 # Copyright 2011, Richard Lowe
14 # Copyright 2014 Nexenta Systems, Inc.
14 # Copyright 2012 Nexenta Systems, Inc. All rights reserved.
15 #
```

```
17 file path=usr/share/man/man5/audit_binfile.5
18 file path=usr/share/man/man5/audit_remote.5
19 file path=usr/share/man/man5/audit_syslog.5
20 file path=usr/share/man/man5/cancellation.5
21 file path=usr/share/man/man5/charmap.5
22 file path=usr/share/man/man5/condition.5
23 file path=usr/share/man/man5/crypt_bsdbf.5
24 file path=usr/share/man/man5/crypt_bsdbmd5.5
25 file path=usr/share/man/man5/crypt_sha256.5
26 file path=usr/share/man/man5/crypt_sha512.5
27 file path=usr/share/man/man5/crypt_sunmd5.5
28 file path=usr/share/man/man5/crypt_unix.5
29 file path=usr/share/man/man5/environ.5
30 file path=usr/share/man/man5/extendedFILE.5
31 file path=usr/share/man/man5/fnmatch.5
32 file path=usr/share/man/man5/isalist.5
33 file path=usr/share/man/man5/largefile.5
34 file path=usr/share/man/man5/lf64.5
35 file path=usr/share/man/man5/lfcompile.5
36 file path=usr/share/man/man5/lfcompile64.5
37 file path=usr/share/man/man5/locale.5
38 file path=usr/share/man/man5/mutex.5
39 file path=usr/share/man/man5/pam_allow.5
40 file path=usr/share/man/man5/pam_authok_check.5
41 file path=usr/share/man/man5/pam_authok_get.5
42 file path=usr/share/man/man5/pam_authok_store.5
43 file path=usr/share/man/man5/pam_deny.5
44 file path=usr/share/man/man5/pam_dhkeys.5
45 file path=usr/share/man/man5/pam_dial_auth.5
46 file path=usr/share/man/man5/pam_ldap.5
47 file path=usr/share/man/man5/pam_list.5
48 file path=usr/share/man/man5/pam_passwd_auth.5
49 file path=usr/share/man/man5/pam_rhosts_auth.5
50 file path=usr/share/man/man5/pam_roles.5
51 file path=usr/share/man/man5/pam_sample.5
52 file path=usr/share/man/man5/pam_timestamp.5
53 file path=usr/share/man/man5/pam_tso1_account.5
54 file path=usr/share/man/man5/pam_unix_account.5
55 file path=usr/share/man/man5/pam_unix_auth.5
56 file path=usr/share/man/man5/pam_unix_cred.5
57 file path=usr/share/man/man5/pam_unix_session.5
58 file path=usr/share/man/man5/pkcs11_kernel.5
59 file path=usr/share/man/man5/pkcs11_softtoken.5
60 file path=usr/share/man/man5/pkcs11_tpm.5
```

new/usr/src/pkg/manifests/system-library.man5.inc

2

```
61 file path=usr/share/man/man5/regex.5
62 file path=usr/share/man/man5/regexp.5
63 file path=usr/share/man/man5/threads.5
64 link path=usr/share/man/man5/advance.5 target=regexp.5
65 link path=usr/share/man/man5/compile.5 target=regexp.5
66 link path=usr/share/man/man5/pthreads.5 target=threads.5
67 link path=usr/share/man/man5/step.5 target=regexp.5
```

```

*****
60539 Wed Sep 17 00:13:24 2014
new/usr/src/pkg/manifests/system-library.mf
5110 want pam_timestamp module
*****
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 2014 Nexenta Systems, Inc.
24 # Copyright 2011 Nexenta Systems, Inc. All rights reserved.
25 # Copyright (c) 2010, Oracle and/or its affiliates. All rights reserved.
26 # Copyright 2012 OmniTI Computer Consulting, Inc. All rights reserved.
27 # Copyright (c) 2013 Gary Mills
28 #
29 <include system-library.man3.inc>
30 <include system-library.man3bsm.inc>
31 <include system-library.man3c.inc>
32 <include system-library.man3c_db.inc>
33 <include system-library.man3cfgadm.inc>
34 <include system-library.man3computil.inc>
35 <include system-library.man3contract.inc>
36 <include system-library.man3curses.inc>
37 <include system-library.man3devid.inc>
38 <include system-library.man3devinfo.inc>
39 <include system-library.man3dlpi.inc>
40 <include system-library.man3elf.inc>
41 <include system-library.man3exacct.inc>
42 <include system-library.man3ext.inc>
43 <include system-library.man3fstyp.inc>
44 <include system-library.man3gen.inc>
45 <include system-library.man3kstat.inc>
46 <include system-library.man3kvm.inc>
47 <include system-library.man3ldap.inc>
48 <include system-library.man3lgrp.inc>
49 <include system-library.man3lib.inc>
50 <include system-library.man3mail.inc>
51 <include system-library.man3malloc.inc>
52 <include system-library.man3mp.inc>
53 <include system-library.man3nsl.inc>
54 <include system-library.man3nvpair.inc>
55 <include system-library.man3pam.inc>
56 <include system-library.man3scf.inc>
57 <include system-library.man3sec.inc>
58 <include system-library.man3secdb.inc>
59 <include system-library.man3sip.inc>
60 <include system-library.man3socket.inc>

```

```

61 <include system-library.man3tsol.inc>
62 <include system-library.man3uuid.inc>
63 <include system-library.man3volmgt.inc>
64 <include system-library.man3xcurses.inc>
65 <include system-library.man3xnet.inc>
66 <include system-library.man4.inc>
67 <include system-library.man5.inc>
68 <include system-library.man7p.inc>
69 set name=pkg.fmri value=pkg:/system/library@$(PKGVERS)
70 set name=pkg.description \
71     value="core shared libraries for a specific instruction-set architecture"
72 set name=pkg.summary value="Core Solaris, (Shared Libs)"
73 set name=info.classification value=org.opensolaris.category.2008:System/Core
74 set name=variant.arch value=$(ARCH)
75 $(i386_ONLY)dir path=etc group=sys
76 $(i386_ONLY)dir path=etc/flash group=sys
77 $(i386_ONLY)dir path=etc/flash/postcreation group=sys mode=0700
78 $(i386_ONLY)dir path=etc/flash/precreation group=sys mode=0700
79 $(i386_ONLY)dir path=etc/flash/preexit group=sys mode=0700
80 dir path=lib
81 dir path=lib/$(ARCH64)
82 dir path=lib/crypto
83 dir path=lib/crypto/$(ARCH64)
84 dir path=lib/mpxio
85 dir path=lib/secure
86 dir path=lib/secure/$(ARCH64)
87 dir path=usr group=sys
88 dir path=usr/bin
89 dir path=usr/ccs
90 dir path=usr/ccs/lib
91 dir path=usr/ccs/lib/$(ARCH64)
92 dir path=usr/lib
93 dir path=usr/lib/$(ARCH64)
94 dir path=usr/lib/cfgadm
95 dir path=usr/lib/cfgadm/$(ARCH64)
96 dir path=usr/lib/iconv/$(ARCH64)
97 $(i386_ONLY)dir path=usr/lib/libc
98 dir path=usr/lib/lwp
99 dir path=usr/lib/lwp/$(ARCH64)
100 dir path=usr/lib/python2.6
101 dir path=usr/lib/python2.6/vendor-packages
102 dir path=usr/lib/python2.6/vendor-packages/solaris
103 dir path=usr/lib/raidcfg
104 dir path=usr/lib/raidcfg/$(ARCH64)
105 dir path=usr/lib/scsi
106 dir path=usr/lib/scsi/$(ARCH64)
107 dir path=usr/lib/scsi/plugins
108 dir path=usr/lib/scsi/plugins/scsi
109 dir path=usr/lib/scsi/plugins/scsi/engines
110 dir path=usr/lib/scsi/plugins/scsi/engines/$(ARCH64)
111 dir path=usr/lib/scsi/plugins/ses
112 dir path=usr/lib/scsi/plugins/ses/framework
113 dir path=usr/lib/scsi/plugins/ses/framework/$(ARCH64)
114 dir path=usr/lib/scsi/plugins/ses/vendor
115 $(sparc_ONLY)dir path=usr/lib/scsi/plugins/ses/vendor/$(ARCH64)
116 dir path=usr/lib/scsi/plugins/smp
117 dir path=usr/lib/scsi/plugins/smp/engine
118 dir path=usr/lib/scsi/plugins/smp/engine/$(ARCH64)
119 dir path=usr/lib/scsi/plugins/smp/framework
120 dir path=usr/lib/scsi/plugins/smp/framework/$(ARCH64)
121 dir path=usr/lib/security
122 dir path=usr/lib/security/$(ARCH64)
123 dir path=usr/share/man
124 dir path=usr/share/man/man3
125 dir path=usr/share/man/man3bsm
126 dir path=usr/share/man/man3c

```

```

127 dir path=usr/share/man/man3c_db
128 dir path=usr/share/man/man3cfgadm
129 dir path=usr/share/man/man3computil
130 dir path=usr/share/man/man3contract
131 dir path=usr/share/man/man3curses
132 dir path=usr/share/man/man3devid
133 dir path=usr/share/man/man3devinfo
134 dir path=usr/share/man/man3dlpi
135 dir path=usr/share/man/man3elf
136 dir path=usr/share/man/man3exacct
137 dir path=usr/share/man/man3ext
138 dir path=usr/share/man/man3fstyp
139 dir path=usr/share/man/man3gen
140 dir path=usr/share/man/man3kstat
141 dir path=usr/share/man/man3kvm
142 dir path=usr/share/man/man3ldap
143 dir path=usr/share/man/man3lgrp
144 dir path=usr/share/man/man3lib
145 dir path=usr/share/man/man3mail
146 dir path=usr/share/man/man3malloc
147 dir path=usr/share/man/man3mp
148 dir path=usr/share/man/man3nsl
149 dir path=usr/share/man/man3nvpair
150 dir path=usr/share/man/man3pam
151 dir path=usr/share/man/man3pool
152 dir path=usr/share/man/man3scf
153 dir path=usr/share/man/man3sec
154 dir path=usr/share/man/man3secdb
155 dir path=usr/share/man/man3sip
156 dir path=usr/share/man/man3socket
157 dir path=usr/share/man/man3tsol
158 dir path=usr/share/man/man3uuid
159 dir path=usr/share/man/man3volmgt
160 dir path=usr/share/man/man3xcurses
161 dir path=usr/share/man/man3xnet
162 dir path=usr/share/man/man5
163 dir path=usr/share/man/man7p
164 dir path=usr/xpg4
165 dir path=usr/xpg4/lib
166 dir path=usr/xpg4/lib/$(ARCH64)
167 $(i386_ONLY)file path=etc/flash/precreation/caplib group=sys mode=0500
168 file path=lib/$(ARCH64)/c_synonyms.so.1
169 file path=lib/$(ARCH64)/ld.so.1
170 file path=lib/$(ARCH64)/libadm.so.1
171 file path=lib/$(ARCH64)/libaio.so.1
172 file path=lib/$(ARCH64)/libavl.so.1
173 file path=lib/$(ARCH64)/libbsm.so.1
174 file path=lib/$(ARCH64)/libc.so.1
175 file path=lib/$(ARCH64)/libc_db.so.1
176 file path=lib/$(ARCH64)/libcmdutils.so.1
177 file path=lib/$(ARCH64)/libcontract.so.1
178 file path=lib/$(ARCH64)/libcryptoutil.so.1
179 file path=lib/$(ARCH64)/libctf.so.1
180 file path=lib/$(ARCH64)/libcurses.so.1
181 file path=lib/$(ARCH64)/libdevice.so.1
182 file path=lib/$(ARCH64)/libdevvid.so.1
183 file path=lib/$(ARCH64)/libdevinfo.so.1
184 file path=lib/$(ARCH64)/libdhcputil.so.1
185 file path=lib/$(ARCH64)/libdl.so.1
186 file path=lib/$(ARCH64)/libdladm.so.1
187 file path=lib/$(ARCH64)/libdlpi.so.1
188 file path=lib/$(ARCH64)/libdoor.so.1
189 file path=lib/$(ARCH64)/libefi.so.1
190 file path=lib/$(ARCH64)/libelf.so.1
191 $(i386_ONLY)file path=lib/$(ARCH64)/libfdisk.so.1
192 file path=lib/$(ARCH64)/libgen.so.1

```

```

193 file path=lib/$(ARCH64)/libinetutil.so.1
194 file path=lib/$(ARCH64)/libintl.so.1
195 file path=lib/$(ARCH64)/libkmf.so.1
196 file path=lib/$(ARCH64)/libkmfberder.so.1
197 file path=lib/$(ARCH64)/libkstat.so.1
198 file path=lib/$(ARCH64)/libld.so.4
199 file path=lib/$(ARCH64)/liblddb.so.4
200 file path=lib/$(ARCH64)/libmd.so.1
201 file path=lib/$(ARCH64)/libmd5.so.1
202 file path=lib/$(ARCH64)/libmp.so.2
203 file path=lib/$(ARCH64)/libnsl.so.1
204 file path=lib/$(ARCH64)/libnvpair.so.1
205 file path=lib/$(ARCH64)/libpam.so.1
206 file path=lib/$(ARCH64)/libproc.so.1
207 file path=lib/$(ARCH64)/libpthread.so.1
208 file path=lib/$(ARCH64)/librcm.so.1
209 file path=lib/$(ARCH64)/libresolv.so.2
210 file path=lib/$(ARCH64)/librestart.so.1
211 file path=lib/$(ARCH64)/librpcsvc.so.1
212 file path=lib/$(ARCH64)/librt.so.1
213 file path=lib/$(ARCH64)/librtld.so.1
214 file path=lib/$(ARCH64)/librtld_db.so.1
215 file path=lib/$(ARCH64)/libscf.so.1
216 file path=lib/$(ARCH64)/libsec.so.1
217 file path=lib/$(ARCH64)/libsecdb.so.1
218 file path=lib/$(ARCH64)/libsendfile.so.1
219 file path=lib/$(ARCH64)/libsocket.so.1
220 file path=lib/$(ARCH64)/libsysevent.so.1
221 file path=lib/$(ARCH64)/libtermcap.so.1
222 file path=lib/$(ARCH64)/libthread.so.1
223 file path=lib/$(ARCH64)/libtsnet.so.1
224 file path=lib/$(ARCH64)/libtsol.so.2
225 file path=lib/$(ARCH64)/libumem.so.1
226 file path=lib/$(ARCH64)/libuuid.so.1
227 file path=lib/$(ARCH64)/libutil.so.1
228 file path=lib/$(ARCH64)/libw.so.1
229 file path=lib/$(ARCH64)/libxnet.so.1
230 file path=lib/$(ARCH64)/nss_compat.so.1
231 file path=lib/$(ARCH64)/nss_dns.so.1
232 file path=lib/$(ARCH64)/nss_files.so.1
233 file path=lib/$(ARCH64)/nss_nis.so.1
234 file path=lib/$(ARCH64)/nss_user.so.1
235 file path=lib/c_synonyms.so.1
236 file path=lib/crypto/$(ARCH64)/kmf_mapper_cn.so.1
237 file path=lib/crypto/$(ARCH64)/kmf_nss.so.1
238 file path=lib/crypto/$(ARCH64)/kmf_openssl.so.1
239 file path=lib/crypto/$(ARCH64)/kmf_pkcs11.so.1
240 file path=lib/crypto/kmf_mapper_cn.so.1
241 file path=lib/crypto/kmf_nss.so.1
242 file path=lib/crypto/kmf_openssl.so.1
243 file path=lib/crypto/kmf_pkcs11.so.1
244 file path=lib/ld.so.1
245 file path=lib/libadm.so.1
246 file path=lib/libaio.so.1
247 file path=lib/libavl.so.1
248 file path=lib/libbsm.so.1
249 file path=lib/libc.so.1 reboot-needed=true
250 file path=lib/libc_db.so.1
251 file path=lib/libcmdutils.so.1
252 file path=lib/libcontract.so.1
253 file path=lib/libcryptoutil.so.1
254 file path=lib/libctf.so.1
255 file path=lib/libcurses.so.1
256 file path=lib/libdevice.so.1
257 file path=lib/libdevvid.so.1
258 file path=lib/libdevinfo.so.1

```



```
259 file path=lib/libdhcpageant.so.1
260 file path=lib/libdhcputil.so.1
261 file path=lib/libddl.so.1
262 file path=lib/libddladm.so.1
263 file path=lib/libdldpi.so.1
264 file path=lib/libdoor.so.1
265 file path=lib/libefi.so.1
266 file path=lib/libelf.so.1
267 file path=lib/libelfsign.so.1
268 $(i386_ONLY)file path=lib/libfdisk.so.1
269 file path=lib/libgen.so.1
270 file path=lib/libinetutil.so.1
271 file path=lib/libintl.so.1
272 file path=lib/libipadm.so.1
273 file path=lib/libipmp.so.1
274 file path=lib/libkccfd.so.1
275 file path=lib/libkmf.so.1
276 file path=lib/libkmfberder.so.1
277 file path=lib/libkstat.so.1
278 file path=lib/libld.so.4
279 file path=lib/liblddbg.so.4
280 file path=lib/libmd.so.1
281 file path=lib/libmd5.so.1
282 file path=lib/libmp.so.1
283 file path=lib/libmp.so.2
284 file path=lib/libnsl.so.1
285 file path=lib/libnvpair.so.1
286 file path=lib/libnwmam.so.1
287 file path=lib/libpam.so.1
288 file path=lib/libproc.so.1
289 file path=lib/libpthread.so.1
290 file path=lib/librcm.so.1
291 file path=lib/libresolv.so.1
292 file path=lib/libresolv.so.2
293 file path=lib/librestart.so.1
294 file path=lib/librpcsvc.so.1
295 file path=lib/librt.so.1
296 file path=lib/librtdb.so.1
297 file path=lib/librtdb_db.so.1
298 file path=lib/libscf.so.1
299 file path=lib/libsec.so.1
300 file path=lib/libsecdb.so.1
301 file path=lib/libsendfile.so.1
302 file path=lib/libsocket.so.1
303 file path=lib/libsysevent.so.1
304 file path=lib/libtermcap.so.1
305 file path=lib/libthread.so.1
306 file path=lib/libtstnet.so.1
307 file path=lib/libtsol.so.2
308 file path=lib/libumem.so.1
309 file path=lib/libuuid.so.1
310 file path=lib/libuutil.so.1
311 file path=lib/libw.so.1
312 file path=lib/libxnet.so.1
313 file path=lib/mpxio/stmsboot_util mode=0555
314 file path=lib/nss_compat.so.1
315 file path=lib/nss_dns.so.1
316 file path=lib/nss_files.so.1
317 file path=lib/nss_nis.so.1
318 file path=lib/nss_user.so.1
319 file path=usr/lib/$(ARCH64)/0@0.so.1
320 file path=usr/lib/$(ARCH64)/getloginx.so.1
321 file path=usr/lib/$(ARCH64)/libadutils.so.1
322 file path=usr/lib/$(ARCH64)/libast.so.1
323 file path=usr/lib/$(ARCH64)/libbsdmalloc.so.1
324 file path=usr/lib/$(ARCH64)/libcfgadm.so.1
```

```
325 file path=usr/lib/$(ARCH64)/libcmd.so.1
326 file path=usr/lib/$(ARCH64)/libcommutil.so.1
327 file path=usr/lib/$(ARCH64)/libcrle.so.1
328 file path=usr/lib/$(ARCH64)/libcrypt.so.1
329 file path=usr/lib/$(ARCH64)/libdisasm.so.1
330 file path=usr/lib/$(ARCH64)/libdll.so.1
331 file path=usr/lib/$(ARCH64)/libexacct.so.1
332 file path=usr/lib/$(ARCH64)/libform.so.1
333 file path=usr/lib/$(ARCH64)/libfstyp.so.1
334 file path=usr/lib/$(ARCH64)/libhotplug.so.1
335 file path=usr/lib/$(ARCH64)/libidmap.so.1
336 file path=usr/lib/$(ARCH64)/libike.so.1
337 file path=usr/lib/$(ARCH64)/libipmi.so.1
338 file path=usr/lib/$(ARCH64)/libipp.so.1
339 file path=usr/lib/$(ARCH64)/libipsecutil.so.1
340 file path=usr/lib/$(ARCH64)/libkvm.so.1
341 file path=usr/lib/$(ARCH64)/libl.so.1
342 file path=usr/lib/$(ARCH64)/libldap.so.5
343 file path=usr/lib/$(ARCH64)/liblgrp.so.1
344 file path=usr/lib/$(ARCH64)/liblm.so.1
345 file path=usr/lib/$(ARCH64)/libmail.so.1
346 file path=usr/lib/$(ARCH64)/libmalloc.so.1
347 file path=usr/lib/$(ARCH64)/libmapmalloc.so.1
348 file path=usr/lib/$(ARCH64)/libmenu.so.1
349 file path=usr/lib/$(ARCH64)/libmtmalloc.so.1
350 file path=usr/lib/$(ARCH64)/libnls.so.1
351 file path=usr/lib/$(ARCH64)/libpanel.so.1
352 file path=usr/lib/$(ARCH64)/libpcidb.so.1
353 file path=usr/lib/$(ARCH64)/libpkcs11.so.1
354 file path=usr/lib/$(ARCH64)/libproject.so.1
355 file path=usr/lib/$(ARCH64)/libraidcfg.so.1
356 file path=usr/lib/$(ARCH64)/libreparse.so.1
357 $(i386_ONLY)file path=usr/lib/$(ARCH64)/libsavargs.so.1
358 file path=usr/lib/$(ARCH64)/libsched.so.1
359 file path=usr/lib/$(ARCH64)/libsctp.so.1
360 file path=usr/lib/$(ARCH64)/libshell.so.1
361 file path=usr/lib/$(ARCH64)/libsip.so.1
362 file path=usr/lib/$(ARCH64)/libslldap.so.1
363 file path=usr/lib/$(ARCH64)/libsmbios.so.1
364 file path=usr/lib/$(ARCH64)/libsoftcrypto.so.1
365 file path=usr/lib/$(ARCH64)/libsum.so.1
366 $(sparc_ONLY)file path=usr/lib/$(ARCH64)/libv12n.so.1
367 file path=usr/lib/$(ARCH64)/libvolmgt.so.1
368 file path=usr/lib/$(ARCH64)/libwrap.so.1.0
369 file path=usr/lib/$(ARCH64)/liby.so.1
370 file path=usr/lib/$(ARCH64)/libzoneinfo.so.1
371 file path=usr/lib/$(ARCH64)/nss_ad.so.1
372 file path=usr/lib/$(ARCH64)/nss_ldap.so.1
373 file path=usr/lib/$(ARCH64)/passwdutil.so.1
374 file path=usr/lib/$(ARCH64)/straddr.so.2
375 file path=usr/lib/$(ARCH64)/watchmalloc.so.1
376 file path=usr/lib/0@0.so.1
377 file path=usr/lib/cfgadm/$(ARCH64)/ib.so.1
378 file path=usr/lib/cfgadm/$(ARCH64)/pci.so.1
379 $(i386_ONLY)file path=usr/lib/cfgadm/$(ARCH64)/sata.so.1
380 file path=usr/lib/cfgadm/$(ARCH64)/scsi.so.1
381 file path=usr/lib/cfgadm/$(ARCH64)/shp.so.1
382 file path=usr/lib/cfgadm/$(ARCH64)/usb.so.1
383 file path=usr/lib/cfgadm/ib.so.1
384 file path=usr/lib/cfgadm/pci.so.1
385 $(i386_ONLY)file path=usr/lib/cfgadm/sata.so.1
386 file path=usr/lib/cfgadm/scsi.so.1
387 file path=usr/lib/cfgadm/shp.so.1
388 file path=usr/lib/cfgadm/usb.so.1
389 file path=usr/lib/extendedFILE.so.1
390 file path=usr/lib/getloginx.so.1
```

```

391 file path=usr/lib/lib.b mode=0444
392 file path=usr/lib/libadutils.so.1
393 file path=usr/lib/libast.so.1
394 file path=usr/lib/libbsdmalloc.so.1
395 $(i386_ONLY)file path=usr/lib/libc/libc_hwcap1.so.1 reboot-needed=true
396 $(i386_ONLY)file path=usr/lib/libc/libc_hwcap2.so.1 reboot-needed=true
397 $(i386_ONLY)file path=usr/lib/libc/libc_hwcap3.so.1 reboot-needed=true
398 file path=usr/lib/libcfdm.so.1
399 file path=usr/lib/libcmd.so.1
400 file path=usr/lib/libcommutil.so.1
401 file path=usr/lib/libcrl.so.1
402 file path=usr/lib/libcrypt.so.1
403 file path=usr/lib/libdisasm.so.1
404 file path=usr/lib/libdll.so.1
405 file path=usr/lib/libexacct.so.1
406 file path=usr/lib/libform.so.1
407 file path=usr/lib/libfstyp.so.1
408 file path=usr/lib/libhotplug.so.1
409 file path=usr/lib/libidmap.so.1
410 file path=usr/lib/libike.so.1
411 file path=usr/lib/libinetsvc.so.1
412 file path=usr/lib/libipmi.so.1
413 file path=usr/lib/libipp.so.1
414 file path=usr/lib/libipsecutil.so.1
415 file path=usr/lib/libkvm.so.1
416 file path=usr/lib/libl.so.1
417 file path=usr/lib/libldap.so.5
418 file path=usr/lib/liblgrp.so.1
419 file path=usr/lib/liblm.so.1
420 file path=usr/lib/libmail.so.1
421 file path=usr/lib/libmalloc.so.1
422 file path=usr/lib/libmapmalloc.so.1
423 file path=usr/lib/libmenu.so.1
424 file path=usr/lib/libmtmalloc.so.1
425 file path=usr/lib/libnls.so.1
426 file path=usr/lib/libpanel.so.1
427 file path=usr/lib/libpcidb.so.1
428 file path=usr/lib/libpkcs11.so.1
429 file path=usr/lib/libproject.so.1
430 file path=usr/lib/libraidcfg.so.1
431 file path=usr/lib/libreparse.so.1
432 file path=usr/lib/libsched.so.1
433 file path=usr/lib/libstcp.so.1
434 file path=usr/lib/libshell.so.1
435 file path=usr/lib/libsip.so.1
436 file path=usr/lib/libslldap.so.1
437 file path=usr/lib/libsmbios.so.1
438 file path=usr/lib/libsoftcrypto.so.1
439 file path=usr/lib/libsum.so.1
440 file path=usr/lib/libsys.so.1
441 $(sparc_ONLY)file path=usr/lib/libv12n.so.1
442 file path=usr/lib/libvolmgt.so.1
443 file path=usr/lib/libwrap.so.1.0
444 file path=usr/lib/liby.so.1
445 file path=usr/lib/libzoneinfo.so.1
446 file path=usr/lib/nss_ad.so.1
447 file path=usr/lib/nss_ldap.so.1
448 file path=usr/lib/passwdutil.so.1
449 file path=usr/lib/python2.6/vendor-packages/solaris/__init__.py
450 file path=usr/lib/python2.6/vendor-packages/solaris/__init__.pyc
451 file path=usr/lib/python2.6/vendor-packages/solaris/misc.so
452 file path=usr/lib/raidcfg/$(ARCH64)/mpt.so.1
453 file path=usr/lib/raidcfg/mpt.so.1
454 file path=usr/lib/scsi/$(ARCH64)/libscsi.so.1
455 file path=usr/lib/scsi/$(ARCH64)/libsesc.so.1
456 file path=usr/lib/scsi/$(ARCH64)/libsmp.so.1

```

```

457 file path=usr/lib/scsi/libscsi.so.1
458 file path=usr/lib/scsi/libsesc.so.1
459 file path=usr/lib/scsi/libsmp.so.1
460 file path=usr/lib/scsi/plugins/scsi/engines/$(ARCH64)/uscsci.so
461 file path=usr/lib/scsi/plugins/scsi/engines/uscsci.so
462 file path=usr/lib/scsi/plugins/ses/framework/$(ARCH64)/libsesc.so
463 file path=usr/lib/scsi/plugins/ses/framework/$(ARCH64)/ses2.so
464 file path=usr/lib/scsi/plugins/ses/framework/libsesc.so
465 file path=usr/lib/scsi/plugins/ses/framework/ses2.so
466 file path=usr/lib/scsi/plugins/smp/engine/$(ARCH64)/usmp.so
467 file path=usr/lib/scsi/plugins/smp/engine/usmp.so
468 file path=usr/lib/scsi/plugins/smp/framework/$(ARCH64)/sas2.so
469 file path=usr/lib/scsi/plugins/smp/framework/sas2.so
470 file path=usr/lib/security/$(ARCH64)/crypt_bsdbf.so.1
471 file path=usr/lib/security/$(ARCH64)/crypt_bsdbf5.so.1
472 file path=usr/lib/security/$(ARCH64)/crypt_sha256.so.1
473 file path=usr/lib/security/$(ARCH64)/crypt_sha512.so.1
474 file path=usr/lib/security/$(ARCH64)/crypt_sunmd5.so.1
475 file path=usr/lib/security/$(ARCH64)/pam_allow.so.1
476 file path=usr/lib/security/$(ARCH64)/pam_authok_check.so.1
477 file path=usr/lib/security/$(ARCH64)/pam_authok_get.so.1
478 file path=usr/lib/security/$(ARCH64)/pam_authok_store.so.1
479 file path=usr/lib/security/$(ARCH64)/pam_deny.so.1
480 file path=usr/lib/security/$(ARCH64)/pam_dhkeys.so.1
481 file path=usr/lib/security/$(ARCH64)/pam_dial_auth.so.1
482 file path=usr/lib/security/$(ARCH64)/pam_ldap.so.1
483 file path=usr/lib/security/$(ARCH64)/pam_list.so.1
484 file path=usr/lib/security/$(ARCH64)/pam_passwd_auth.so.1
485 file path=usr/lib/security/$(ARCH64)/pam_rhosts_auth.so.1
486 file path=usr/lib/security/$(ARCH64)/pam_roles.so.1
487 file path=usr/lib/security/$(ARCH64)/pam_sample.so.1
488 file path=usr/lib/security/$(ARCH64)/pam_timestamp.so.1
489 file path=usr/lib/security/$(ARCH64)/pam_tsol_account.so.1
490 file path=usr/lib/security/$(ARCH64)/pam_unix_account.so.1
491 file path=usr/lib/security/$(ARCH64)/pam_unix_auth.so.1
492 file path=usr/lib/security/$(ARCH64)/pam_unix_cred.so.1
493 file path=usr/lib/security/$(ARCH64)/pam_unix_session.so.1
494 file path=usr/lib/security/$(ARCH64)/pkcs11_kernel.so.1
495 file path=usr/lib/security/$(ARCH64)/pkcs11_softtoken.so.1
496 file path=usr/lib/security/$(ARCH64)/pkcs11_tpm.so.1
497 file path=usr/lib/security/audit_binfile.so.1
498 file path=usr/lib/security/audit_remote.so.1
499 file path=usr/lib/security/audit_syslog.so.1
500 file path=usr/lib/security/crypt_bsdbf.so.1
501 file path=usr/lib/security/crypt_bsdbf5.so.1
502 file path=usr/lib/security/crypt_sha256.so.1
503 file path=usr/lib/security/crypt_sha512.so.1
504 file path=usr/lib/security/crypt_sunmd5.so.1
505 file path=usr/lib/security/pam_allow.so.1
506 file path=usr/lib/security/pam_authok_check.so.1
507 file path=usr/lib/security/pam_authok_get.so.1
508 file path=usr/lib/security/pam_authok_store.so.1
509 file path=usr/lib/security/pam_deny.so.1
510 file path=usr/lib/security/pam_dhkeys.so.1
511 file path=usr/lib/security/pam_dial_auth.so.1
512 file path=usr/lib/security/pam_ldap.so.1
513 file path=usr/lib/security/pam_list.so.1
514 file path=usr/lib/security/pam_passwd_auth.so.1
515 file path=usr/lib/security/pam_rhosts_auth.so.1
516 file path=usr/lib/security/pam_roles.so.1
517 file path=usr/lib/security/pam_sample.so.1
518 file path=usr/lib/security/pam_timestamp.so.1
519 file path=usr/lib/security/pam_tsol_account.so.1
520 file path=usr/lib/security/pam_unix_account.so.1
521 file path=usr/lib/security/pam_unix_auth.so.1
522 file path=usr/lib/security/pam_unix_cred.so.1

```

```

523 file path=usr/lib/security/pam_unix_session.so.1
524 file path=usr/lib/security/pkcs11_kernel.so.1
525 file path=usr/lib/security/pkcs11_softtoken.so.1
526 file path=usr/lib/security/pkcs11_tpm.so.1
527 file path=usr/lib/straddr.so.2
528 file path=usr/lib/watchmalloc.so.1
529 # XXX: Obsoleted by open il8n?
530 file path=usr/xpg4/lib/$(ARCH64)/libcurses.so.1
531 file path=usr/xpg4/lib/$(ARCH64)/libcurses.so.2
532 file path=usr/xpg4/lib/libcurses.so.1
533 file path=usr/xpg4/lib/libcurses.so.2
534 legacy pkg=SUNwscsl \
535     desc="core shared libraries for a specific instruction-set architecture" \
536     name="Core Solaris, (Shared Libs)"
537 legacy pkg=SUNwscslr \
538     desc="core software for a specific instruction-set architecture" \
539     name="Core Solaris Libraries (Root)"
540 license cr_Sun license=cr_Sun
541 license lic_CDDL license=lic_CDDL
542 license lic_OSBL license=lic_OSBL
543 license lic_OSBL_preamble license=lic_OSBL_preamble
544 # libwrap is part of tcp wrappers along with tcpd
545 license usr/src/cmd/tcpd/THIRDPARTYLICENSE \
546     license=usr/src/cmd/tcpd/THIRDPARTYLICENSE
547 license usr/src/common/crypto/THIRDPARTYLICENSE.cryptogams \
548     license=usr/src/common/crypto/THIRDPARTYLICENSE.cryptogams
549 license usr/src/common/crypto/aes/amd64/THIRDPARTYLICENSE.gladman \
550     license=usr/src/common/crypto/aes/amd64/THIRDPARTYLICENSE.gladman
551 license usr/src/common/crypto/aes/amd64/THIRDPARTYLICENSE.openssl \
552     license=usr/src/common/crypto/aes/amd64/THIRDPARTYLICENSE.openssl
553 license usr/src/common/crypto/ecc/THIRDPARTYLICENSE \
554     license=usr/src/common/crypto/ecc/THIRDPARTYLICENSE
555 license usr/src/common/crypto/md5/amd64/THIRDPARTYLICENSE \
556     license=usr/src/common/crypto/md5/amd64/THIRDPARTYLICENSE
557 license usr/src/common/mpi/THIRDPARTYLICENSE \
558     license=usr/src/common/mpi/THIRDPARTYLICENSE
559 license usr/src/lib/libast/THIRDPARTYLICENSE \
560     license=usr/src/lib/libast/THIRDPARTYLICENSE
561 license usr/src/lib/libbsdmalloc/THIRDPARTYLICENSE \
562     license=usr/src/lib/libbsdmalloc/THIRDPARTYLICENSE
563 license usr/src/lib/libc/THIRDPARTYLICENSE \
564     license=usr/src/lib/libc/THIRDPARTYLICENSE
565 license usr/src/lib/libcmd/THIRDPARTYLICENSE \
566     license=usr/src/lib/libcmd/THIRDPARTYLICENSE
567 license usr/src/lib/libdll/THIRDPARTYLICENSE \
568     license=usr/src/lib/libdll/THIRDPARTYLICENSE
569 license usr/src/lib/libinetutil/common/THIRDPARTYLICENSE \
570     license=usr/src/lib/libinetutil/common/THIRDPARTYLICENSE
571 license usr/src/lib/libkmf/THIRDPARTYLICENSE \
572     license=usr/src/lib/libkmf/THIRDPARTYLICENSE
573 license usr/src/lib/libldap5/THIRDPARTYLICENSE \
574     license=usr/src/lib/libldap5/THIRDPARTYLICENSE
575 license usr/src/lib/libmp/common/THIRDPARTYLICENSE \
576     license=usr/src/lib/libmp/common/THIRDPARTYLICENSE
577 license usr/src/lib/libresolv/THIRDPARTYLICENSE \
578     license=usr/src/lib/libresolv/THIRDPARTYLICENSE
579 license usr/src/lib/libresolv2/THIRDPARTYLICENSE \
580     license=usr/src/lib/libresolv2/THIRDPARTYLICENSE
581 license usr/src/lib/libshell/THIRDPARTYLICENSE \
582     license=usr/src/lib/libshell/THIRDPARTYLICENSE
583 license usr/src/lib/libsum/THIRDPARTYLICENSE \
584     license=usr/src/lib/libsum/THIRDPARTYLICENSE
585 license usr/src/lib/pam_modules/authok_check/THIRDPARTYLICENSE \
586     license=usr/src/lib/pam_modules/authok_check/THIRDPARTYLICENSE
587 license usr/src/lib/passwdutil/THIRDPARTYLICENSE \
588     license=usr/src/lib/passwdutil/THIRDPARTYLICENSE

```

```

589 license usr/src/lib/pkcs11/pkcs11_tpm/THIRDPARTYLICENSE \
590     license=usr/src/lib/pkcs11/pkcs11_tpm/THIRDPARTYLICENSE
591 license usr/src/uts/common/sys/THIRDPARTYLICENSE.unicode \
592     license=usr/src/uts/common/sys/THIRDPARTYLICENSE.unicode
593 link path=lib/$(ARCH64)/libadm.so target=libadm.so.1
594 link path=lib/$(ARCH64)/libaio.so target=libaio.so.1
595 link path=lib/$(ARCH64)/libbsm.so target=libbsm.so.1
596 link path=lib/$(ARCH64)/libc.so reboot-needed=true target=libc.so.1
597 link path=lib/$(ARCH64)/libc_db.so target=libc_db.so.1
598 link path=lib/$(ARCH64)/libcontract.so target=libcontract.so.1
599 link path=lib/$(ARCH64)/libcryptoutil.so target=libcryptoutil.so.1
600 link path=lib/$(ARCH64)/libctf.so target=libctf.so.1
601 link path=lib/$(ARCH64)/libcurses.so target=libcurses.so.1
602 link path=lib/$(ARCH64)/libdevice.so target=libdevice.so.1
603 link path=lib/$(ARCH64)/libdevinfo.so target=libdevinfo.so.1
604 link path=lib/$(ARCH64)/libdevinfo.so target=libdevinfo.so.1
605 link path=lib/$(ARCH64)/libdl.so target=libdl.so.1
606 link path=lib/$(ARCH64)/libldadm.so target=libldadm.so.1
607 link path=lib/$(ARCH64)/libldpi.so target=libldpi.so.1
608 link path=lib/$(ARCH64)/libdoor.so target=libdoor.so.1
609 link path=lib/$(ARCH64)/libefi.so target=libefi.so.1
610 link path=lib/$(ARCH64)/libelf.so target=libelf.so.1
611 # (i386_ONLY) link path=lib/$(ARCH64)/libfdisk.so target=libfdisk.so.1
612 link path=lib/$(ARCH64)/libgen.so target=libgen.so.1
613 link path=lib/$(ARCH64)/libintl.so target=libintl.so.1
614 link path=lib/$(ARCH64)/libkmf.so target=libkmf.so.1
615 link path=lib/$(ARCH64)/libkmfberder.so target=libkmfberder.so.1
616 link path=lib/$(ARCH64)/libkstat.so target=libkstat.so.1
617 link path=lib/$(ARCH64)/libmd.so target=libmd.so.1
618 link path=lib/$(ARCH64)/libmd5.so target=libmd5.so.1
619 link path=lib/$(ARCH64)/libmp.so target=libmp.so.2
620 link path=lib/$(ARCH64)/libnsl.so target=libnsl.so.1
621 link path=lib/$(ARCH64)/libnvpair.so target=libnvpair.so.1
622 link path=lib/$(ARCH64)/libpam.so target=libpam.so.1
623 link path=lib/$(ARCH64)/libposix4.so target=libposix4.so.1
624 link path=lib/$(ARCH64)/libposix4.so.1 target=librt.so.1
625 link path=lib/$(ARCH64)/libproc.so target=libproc.so.1
626 link path=lib/$(ARCH64)/libpthread.so target=libpthread.so.1
627 link path=lib/$(ARCH64)/librcm.so target=librcm.so.1
628 link path=lib/$(ARCH64)/libresolv.so target=libresolv.so.2
629 link path=lib/$(ARCH64)/librestart.so target=librestart.so.1
630 link path=lib/$(ARCH64)/librpcsvc.so target=librpcsvc.so.1
631 link path=lib/$(ARCH64)/librt.so target=librt.so.1
632 link path=lib/$(ARCH64)/librtld_db.so target=librtld_db.so.1
633 link path=lib/$(ARCH64)/libscf.so target=libscf.so.1
634 link path=lib/$(ARCH64)/libsec.so target=libsec.so.1
635 link path=lib/$(ARCH64)/libsecdb.so target=libsecdb.so.1
636 link path=lib/$(ARCH64)/libsendfile.so target=libsendfile.so.1
637 link path=lib/$(ARCH64)/libsocket.so target=libsocket.so.1
638 link path=lib/$(ARCH64)/libsysevent.so target=libsysevent.so.1
639 link path=lib/$(ARCH64)/libtermcap.so target=libtermcap.so.1
640 link path=lib/$(ARCH64)/libtermplib.so target=libtermplib.so.1
641 link path=lib/$(ARCH64)/libtermplib.so.1 target=libcurses.so.1
642 link path=lib/$(ARCH64)/libthread.so target=libthread.so.1
643 link path=lib/$(ARCH64)/libthread_db.so target=libc_db.so.1
644 link path=lib/$(ARCH64)/libthread_db.so.1 target=libc_db.so.1
645 link path=lib/$(ARCH64)/libtsnet.so target=libtsnet.so.1
646 link path=lib/$(ARCH64)/libtsol.so target=libtsol.so.2
647 link path=lib/$(ARCH64)/libumem.so target=libumem.so.1
648 link path=lib/$(ARCH64)/libuuid.so target=libuuid.so.1
649 link path=lib/$(ARCH64)/libuutil.so target=libuutil.so.1
650 link path=lib/$(ARCH64)/libw.so target=libw.so.1
651 link path=lib/$(ARCH64)/libxnet.so target=libxnet.so.1
652 link path=lib/32 target=.
653 link path=lib/64 target=$(ARCH64)
654 link path=lib/crypto/32 target=.

```

```

655 link path=lib/crypto/64 target=$(ARCH64)
656 link path=lib/libadm.so target=libadm.so.1
657 link path=lib/libaio.so target=libaio.so.1
658 link path=lib/libbssm.so target=libbssm.so.1
659 link path=lib/libc.so target=libc.so.1
660 link path=lib/libc_db.so target=libc_db.so.1
661 link path=lib/libcontract.so target=libcontract.so.1
662 link path=lib/libcryptoutil.so target=libcryptoutil.so.1
663 link path=lib/libctf.so target=libctf.so.1
664 link path=lib/libcurses.so target=libcurses.so.1
665 link path=lib/libdevice.so target=libdevice.so.1
666 link path=lib/libdevvid.so target=libdevvid.so.1
667 link path=lib/libdevinfo.so target=libdevinfo.so.1
668 link path=lib/libdl.so target=libdl.so.1
669 link path=lib/libdladm.so target=libdladm.so.1
670 link path=lib/libdldpi.so target=libdldpi.so.1
671 link path=lib/libdoor.so target=libdoor.so.1
672 link path=lib/libefi.so target=libefi.so.1
673 link path=lib/libelf.so target=libelf.so.1
674 link path=lib/libelfsign.so target=libelfsign.so.1
675 $(i386_ONLY)link path=lib/libfdisk.so target=libfdisk.so.1
676 link path=lib/libgen.so target=libgen.so.1
677 link path=lib/libintl.so target=libintl.so.1
678 link path=lib/libipmp.so target=libipmp.so.1
679 link path=lib/libkfmf.so target=libkfmf.so.1
680 link path=lib/libkfmfberder.so target=libkfmfberder.so.1
681 link path=lib/libkstat.so target=libkstat.so.1
682 link path=lib/libmd.so target=libmd.so.1
683 link path=lib/libmd5.so target=libmd5.so.1
684 link path=lib/libmp.so target=libmp.so.2
685 link path=lib/libnsl.so target=libnsl.so.1
686 link path=lib/libnvpair.so target=libnvpair.so.1
687 link path=lib/libnwam.so target=libnwam.so.1
688 link path=lib/libpam.so target=libpam.so.1
689 link path=lib/libposix4.so target=libposix4.so.1
690 link path=lib/libposix4.so.1 target=librt.so.1
691 link path=lib/libproc.so target=libproc.so.1
692 link path=lib/libpthread.so target=libpthread.so.1
693 link path=lib/librcm.so target=librcm.so.1
694 link path=lib/libresolv.so target=libresolv.so.2
695 link path=lib/librpcsvc.so target=librpcsvc.so.1
696 link path=lib/librt.so target=librt.so.1
697 link path=lib/librtld_db.so target=librtld_db.so.1
698 link path=lib/libscf.so target=libscf.so.1
699 link path=lib/libsec.so target=libsec.so.1
700 link path=lib/libsecdb.so target=libsecdb.so.1
701 link path=lib/libsendfile.so target=libsendfile.so.1
702 link path=lib/libsocket.so target=libsocket.so.1
703 link path=lib/libsysevent.so target=libsysevent.so.1
704 link path=lib/libtermcap.so target=libtermcap.so.1
705 link path=lib/libtermplib.so target=libtermplib.so.1
706 link path=lib/libtermplib.so.1 target=libcurses.so.1
707 link path=lib/libthread.so target=libthread.so.1
708 link path=lib/libthread_db.so target=lib_db.so.1
709 link path=lib/libthread_db.so.1 target=libc_db.so.1
710 link path=lib/libtsol.so target=libtsol.so.2
711 link path=lib/libumem.so target=libumem.so.1
712 link path=lib/libuuid.so target=libuuid.so.1
713 link path=lib/libw.so target=libw.so.1
714 link path=lib/libxnet.so target=libxnet.so.1
715 link path=lib/secure/32 target=.
716 link path=lib/secure/64 target=$(ARCH64)
717 link path=usr/ccs/lib/$(ARCH64)/libcurses.so \
718     target=../../../../lib/$(ARCH64)/libcurses.so.1
719 link path=usr/ccs/lib/$(ARCH64)/libform.so \
720     target=../../../../lib/$(ARCH64)/libform.so.1

```

```

721 link path=usr/ccs/lib/$(ARCH64)/libgen.so \
722     target=../../../../lib/$(ARCH64)/libgen.so.1
723 link path=usr/ccs/lib/$(ARCH64)/libl.so \
724     target=../../../../lib/$(ARCH64)/libl.so.1
725 link path=usr/ccs/lib/$(ARCH64)/libmalloc.so \
726     target=../../../../lib/$(ARCH64)/libmalloc.so.1
727 link path=usr/ccs/lib/$(ARCH64)/libmenu.so \
728     target=../../../../lib/$(ARCH64)/libmenu.so.1
729 link path=usr/ccs/lib/$(ARCH64)/libpanel.so \
730     target=../../../../lib/$(ARCH64)/libpanel.so.1
731 link path=usr/ccs/lib/$(ARCH64)/libtermcap.so \
732     target=../../../../lib/$(ARCH64)/libtermcap.so.1
733 link path=usr/ccs/lib/$(ARCH64)/libtermplib.so \
734     target=../../../../lib/$(ARCH64)/libtermplib.so.1
735 link path=usr/ccs/lib/$(ARCH64)/liby.so \
736     target=../../../../lib/$(ARCH64)/liby.so.1
737 link path=usr/ccs/lib/libcurses.so target=../../../../lib/libcurses.so.1
738 link path=usr/ccs/lib/libform.so target=../../../../lib/libform.so.1
739 link path=usr/ccs/lib/libgen.so target=../../../../lib/libgen.so.1
740 link path=usr/ccs/lib/libl.so target=../../../../lib/libl.so.1
741 link path=usr/ccs/lib/libmalloc.so target=../../../../lib/libmalloc.so.1
742 link path=usr/ccs/lib/libmenu.so target=../../../../lib/libmenu.so.1
743 link path=usr/ccs/lib/libpanel.so target=../../../../lib/libpanel.so.1
744 link path=usr/ccs/lib/libtermcap.so target=../../../../lib/libtermcap.so.1
745 link path=usr/ccs/lib/libtermplib.so target=../../../../lib/libtermplib.so.1
746 link path=usr/ccs/lib/liby.so target=../../../../lib/liby.so.1
747 link path=usr/lib/$(ARCH64)/libadm.so \
748     target=../../../../lib/$(ARCH64)/libadm.so.1
749 link path=usr/lib/$(ARCH64)/libadm.so.1 \
750     target=../../../../lib/$(ARCH64)/libadm.so.1
751 link path=usr/lib/$(ARCH64)/libadutils.so target=libadutils.so.1
752 link path=usr/lib/$(ARCH64)/libaio.so \
753     target=../../../../lib/$(ARCH64)/libaio.so.1
754 link path=usr/lib/$(ARCH64)/libaio.so.1 \
755     target=../../../../lib/$(ARCH64)/libaio.so.1
756 link path=usr/lib/$(ARCH64)/libavl.so.1 \
757     target=../../../../lib/$(ARCH64)/libavl.so.1
758 link path=usr/lib/$(ARCH64)/libbsdmalloc.so target=libbsdmalloc.so.1
759 link path=usr/lib/$(ARCH64)/libbssm.so \
760     target=../../../../lib/$(ARCH64)/libbssm.so.1
761 link path=usr/lib/$(ARCH64)/libbssm.so.1 \
762     target=../../../../lib/$(ARCH64)/libbssm.so.1
763 link path=usr/lib/$(ARCH64)/libc.so target=../../../../lib/$(ARCH64)/libc.so.1
764 link path=usr/lib/$(ARCH64)/libc.so.1 target=../../../../lib/$(ARCH64)/libc.so.1
765 link path=usr/lib/$(ARCH64)/libc_db.so \
766     target=../../../../lib/$(ARCH64)/libc_db.so.1
767 link path=usr/lib/$(ARCH64)/libc_db.so.1 \
768     target=../../../../lib/$(ARCH64)/libc_db.so.1
769 link path=usr/lib/$(ARCH64)/libcfgadm.so target=libcfgadm.so.1
770 link path=usr/lib/$(ARCH64)/libcmd.so target=libcmd.so.1
771 link path=usr/lib/$(ARCH64)/libcmdutils.so.1 \
772     target=../../../../lib/$(ARCH64)/libcmdutils.so.1
773 link path=usr/lib/$(ARCH64)/libcommputil.so target=libcommputil.so.1
774 link path=usr/lib/$(ARCH64)/libcontract.so \
775     target=../../../../lib/$(ARCH64)/libcontract.so.1
776 link path=usr/lib/$(ARCH64)/libcontract.so.1 \
777     target=../../../../lib/$(ARCH64)/libcontract.so.1
778 link path=usr/lib/$(ARCH64)/libcrypt.so target=libcrypt.so.1
779 link path=usr/lib/$(ARCH64)/libcrypt_d.so target=libcrypt.so
780 link path=usr/lib/$(ARCH64)/libcrypt_d.so.1 target=libcrypt.so.1
781 link path=usr/lib/$(ARCH64)/libcrypt_i.so target=libcrypt.so
782 link path=usr/lib/$(ARCH64)/libcrypt_i.so.1 target=libcrypt.so.1
783 link path=usr/lib/$(ARCH64)/libctf.so \
784     target=../../../../lib/$(ARCH64)/libctf.so.1
785 link path=usr/lib/$(ARCH64)/libctf.so.1 \
786     target=../../../../lib/$(ARCH64)/libctf.so.1

```

```

787 link path=usr/lib/$(ARCH64)/libcurses.so \
788     target=../../../../lib/$(ARCH64)/libcurses.so.1
789 link path=usr/lib/$(ARCH64)/libcurses.so.1 \
790     target=../../../../lib/$(ARCH64)/libcurses.so.1
791 link path=usr/lib/$(ARCH64)/libdevice.so \
792     target=../../../../lib/$(ARCH64)/libdevice.so.1
793 link path=usr/lib/$(ARCH64)/libdevice.so.1 \
794     target=../../../../lib/$(ARCH64)/libdevice.so.1
795 link path=usr/lib/$(ARCH64)/libdevvid.so \
796     target=../../../../lib/$(ARCH64)/libdevvid.so.1
797 link path=usr/lib/$(ARCH64)/libdevvid.so.1 \
798     target=../../../../lib/$(ARCH64)/libdevvid.so.1
799 link path=usr/lib/$(ARCH64)/libdevinfo.so \
800     target=../../../../lib/$(ARCH64)/libdevinfo.so.1
801 link path=usr/lib/$(ARCH64)/libdevinfo.so.1 \
802     target=../../../../lib/$(ARCH64)/libdevinfo.so.1
803 link path=usr/lib/$(ARCH64)/libdhcputil.so.1 \
804     target=../../../../lib/$(ARCH64)/libdhcputil.so.1
805 link path=usr/lib/$(ARCH64)/libdisasm.so target=libdisasm.so.1
806 link path=usr/lib/$(ARCH64)/libdl.so target=../../../../lib/$(ARCH64)/libdl.so.1
807 link path=usr/lib/$(ARCH64)/libdl.so.1 \
808     target=../../../../lib/$(ARCH64)/libdl.so.1
809 link path=usr/lib/$(ARCH64)/libdlpi.so \
810     target=../../../../lib/$(ARCH64)/libdlpi.so.1
811 link path=usr/lib/$(ARCH64)/libdlpi.so.1 \
812     target=../../../../lib/$(ARCH64)/libdlpi.so.1
813 link path=usr/lib/$(ARCH64)/libdoor.so \
814     target=../../../../lib/$(ARCH64)/libdoor.so.1
815 link path=usr/lib/$(ARCH64)/libdoor.so.1 \
816     target=../../../../lib/$(ARCH64)/libdoor.so.1
817 link path=usr/lib/$(ARCH64)/libefi.so \
818     target=../../../../lib/$(ARCH64)/libefi.so.1
819 link path=usr/lib/$(ARCH64)/libefi.so.1 \
820     target=../../../../lib/$(ARCH64)/libefi.so.1
821 link path=usr/lib/$(ARCH64)/libelf.so \
822     target=../../../../lib/$(ARCH64)/libelf.so.1
823 link path=usr/lib/$(ARCH64)/libelf.so.1 \
824     target=../../../../lib/$(ARCH64)/libelf.so.1
825 link path=usr/lib/$(ARCH64)/libexacct.so target=libexacct.so.1
826 $(i386_ONLY)link path=usr/lib/$(ARCH64)/libfdisk.so \
827     target=../../../../lib/$(ARCH64)/libfdisk.so.1
828 $(i386_ONLY)link path=usr/lib/$(ARCH64)/libfdisk.so.1 \
829     target=../../../../lib/$(ARCH64)/libfdisk.so.1
830 link path=usr/lib/$(ARCH64)/libform.so target=libform.so.1
831 link path=usr/lib/$(ARCH64)/libfstyp.so target=../libfstyp.so.1
832 link path=usr/lib/$(ARCH64)/libgen.so \
833     target=../../../../lib/$(ARCH64)/libgen.so.1
834 link path=usr/lib/$(ARCH64)/libgen.so.1 \
835     target=../../../../lib/$(ARCH64)/libgen.so.1
836 link path=usr/lib/$(ARCH64)/libhotplug.so target=libhotplug.so.1
837 link path=usr/lib/$(ARCH64)/libidmap.so target=../libidmap.so.1
838 link path=usr/lib/$(ARCH64)/libinetutil.so.1 \
839     target=../../../../lib/$(ARCH64)/libinetutil.so.1
840 link path=usr/lib/$(ARCH64)/libintl.so \
841     target=../../../../lib/$(ARCH64)/libintl.so.1
842 link path=usr/lib/$(ARCH64)/libintl.so.1 \
843     target=../../../../lib/$(ARCH64)/libintl.so.1
844 link path=usr/lib/$(ARCH64)/libipmi.so target=../libipmi.so.1
845 link path=usr/lib/$(ARCH64)/libipp.so target=libipp.so.1
846 link path=usr/lib/$(ARCH64)/libkstat.so \
847     target=../../../../lib/$(ARCH64)/libkstat.so.1
848 link path=usr/lib/$(ARCH64)/libkstat.so.1 \
849     target=../../../../lib/$(ARCH64)/libkstat.so.1
850 link path=usr/lib/$(ARCH64)/libkvm.so target=libkvm.so.1
851 link path=usr/lib/$(ARCH64)/libl.so target=libl.so.1
852 link path=usr/lib/$(ARCH64)/libldap.so target=libldap.so.5

```

```

853 link path=usr/lib/$(ARCH64)/liblddbg.so.4 \
854     target=../../../../lib/$(ARCH64)/liblddbg.so.4
855 link path=usr/lib/$(ARCH64)/liblgrp.so target=liblgrp.so.1
856 link path=usr/lib/$(ARCH64)/liblm.so target=liblm.so.1
857 link path=usr/lib/$(ARCH64)/libmail.so target=libmail.so.1
858 link path=usr/lib/$(ARCH64)/libmalloc.so target=libmalloc.so.1
859 link path=usr/lib/$(ARCH64)/libmapmalloc.so target=libmapmalloc.so.1
860 link path=usr/lib/$(ARCH64)/libmd.so target=../../../../lib/$(ARCH64)/libmd.so.1
861 link path=usr/lib/$(ARCH64)/libmd.so.1 \
862     target=../../../../lib/$(ARCH64)/libmd.so.1
863 link path=usr/lib/$(ARCH64)/libmd5.so \
864     target=../../../../lib/$(ARCH64)/libmd5.so.1
865 link path=usr/lib/$(ARCH64)/libmd5.so.1 \
866     target=../../../../lib/$(ARCH64)/libmd5.so.1
867 link path=usr/lib/$(ARCH64)/libmenu.so target=libmenu.so.1
868 link path=usr/lib/$(ARCH64)/libmp.so target=../../../../lib/$(ARCH64)/libmp.so.2
869 link path=usr/lib/$(ARCH64)/libmp.so.2 \
870     target=../../../../lib/$(ARCH64)/libmp.so.2
871 link path=usr/lib/$(ARCH64)/libmtmalloc.so target=libmtmalloc.so.1
872 link path=usr/lib/$(ARCH64)/libnls.so target=libnls.so.1
873 link path=usr/lib/$(ARCH64)/libnsl.so \
874     target=../../../../lib/$(ARCH64)/libnsl.so.1
875 link path=usr/lib/$(ARCH64)/libnsl.so.1 \
876     target=../../../../lib/$(ARCH64)/libnsl.so.1
877 link path=usr/lib/$(ARCH64)/libnvpair.so \
878     target=../../../../lib/$(ARCH64)/libnvpair.so.1
879 link path=usr/lib/$(ARCH64)/libnvpair.so.1 \
880     target=../../../../lib/$(ARCH64)/libnvpair.so.1
881 link path=usr/lib/$(ARCH64)/libpam.so \
882     target=../../../../lib/$(ARCH64)/libpam.so.1
883 link path=usr/lib/$(ARCH64)/libpam.so.1 \
884     target=../../../../lib/$(ARCH64)/libpam.so.1
885 link path=usr/lib/$(ARCH64)/libpanel.so target=libpanel.so.1
886 link path=usr/lib/$(ARCH64)/libpkcs11.so target=libpkcs11.so.1
887 link path=usr/lib/$(ARCH64)/libposix4.so \
888     target=../../../../lib/$(ARCH64)/librt.so.1
889 link path=usr/lib/$(ARCH64)/libposix4.so.1 \
890     target=../../../../lib/$(ARCH64)/librt.so.1
891 link path=usr/lib/$(ARCH64)/libproc.so \
892     target=../../../../lib/$(ARCH64)/libproc.so.1
893 link path=usr/lib/$(ARCH64)/libproc.so.1 \
894     target=../../../../lib/$(ARCH64)/libproc.so.1
895 link path=usr/lib/$(ARCH64)/libproject.so target=libproject.so.1
896 link path=usr/lib/$(ARCH64)/libpthread.so \
897     target=../../../../lib/$(ARCH64)/libpthread.so.1
898 link path=usr/lib/$(ARCH64)/libpthread.so.1 \
899     target=../../../../lib/$(ARCH64)/libpthread.so.1
900 link path=usr/lib/$(ARCH64)/librcm.so \
901     target=../../../../lib/$(ARCH64)/librcm.so.1
902 link path=usr/lib/$(ARCH64)/librcm.so.1 \
903     target=../../../../lib/$(ARCH64)/librcm.so.1
904 link path=usr/lib/$(ARCH64)/librepase.so target=librepase.so.1
905 link path=usr/lib/$(ARCH64)/libresolv.so \
906     target=../../../../lib/$(ARCH64)/libresolv.so.2
907 link path=usr/lib/$(ARCH64)/libresolv.so.2 \
908     target=../../../../lib/$(ARCH64)/libresolv.so.2
909 $(i386_ONLY)link path=usr/lib/$(ARCH64)/librestart.so \
910     target=../../../../lib/$(ARCH64)/librestart.so.1
911 link path=usr/lib/$(ARCH64)/librestart.so.1 \
912     target=../../../../lib/$(ARCH64)/librestart.so.1
913 link path=usr/lib/$(ARCH64)/librpcsvc.so \
914     target=../../../../lib/$(ARCH64)/librpcsvc.so.1
915 link path=usr/lib/$(ARCH64)/librpcsvc.so.1 \
916     target=../../../../lib/$(ARCH64)/librpcsvc.so.1
917 link path=usr/lib/$(ARCH64)/librt.so target=../../../../lib/$(ARCH64)/librt.so.1
918 link path=usr/lib/$(ARCH64)/librt.so.1 \

```

```

919 target=../../../../lib/$(ARCH64)/librt.so.1
920 link path=usr/lib/$(ARCH64)/librtld.so.1 \
921 target=../../../../lib/$(ARCH64)/librtld.so.1
922 link path=usr/lib/$(ARCH64)/librtld_db.so \
923 target=../../../../lib/$(ARCH64)/librtld_db.so.1
924 link path=usr/lib/$(ARCH64)/librtld_db.so.1 \
925 target=../../../../lib/$(ARCH64)/librtld_db.so.1
926 link path=usr/lib/$(ARCH64)/libscf.so \
927 target=../../../../lib/$(ARCH64)/libscf.so.1
928 link path=usr/lib/$(ARCH64)/libscf.so.1 \
929 target=../../../../lib/$(ARCH64)/libscf.so.1
930 link path=usr/lib/$(ARCH64)/libsched.so target=libsched.so.1
931 link path=usr/lib/$(ARCH64)/libsctp.so target=libsctp.so.1
932 link path=usr/lib/$(ARCH64)/libsec.so \
933 target=../../../../lib/$(ARCH64)/libsec.so.1
934 link path=usr/lib/$(ARCH64)/libsec.so.1 \
935 target=../../../../lib/$(ARCH64)/libsec.so.1
936 link path=usr/lib/$(ARCH64)/libsecdb.so \
937 target=../../../../lib/$(ARCH64)/libsecdb.so.1
938 link path=usr/lib/$(ARCH64)/libsecdb.so.1 \
939 target=../../../../lib/$(ARCH64)/libsecdb.so.1
940 link path=usr/lib/$(ARCH64)/libsndfile.so \
941 target=../../../../lib/$(ARCH64)/libsndfile.so.1
942 link path=usr/lib/$(ARCH64)/libsndfile.so.1 \
943 target=../../../../lib/$(ARCH64)/libsndfile.so.1
944 link path=usr/lib/$(ARCH64)/libsip.so target=libsip.so.1
945 link path=usr/lib/$(ARCH64)/libslldap.so target=libslldap.so.1
946 link path=usr/lib/$(ARCH64)/libsmbios.so target=libsmbios.so.1
947 link path=usr/lib/$(ARCH64)/libsocket.so \
948 target=../../../../lib/$(ARCH64)/libsocket.so.1
949 link path=usr/lib/$(ARCH64)/libsocket.so.1 \
950 target=../../../../lib/$(ARCH64)/libsocket.so.1
951 link path=usr/lib/$(ARCH64)/libsoftcrypto.so target=libsoftcrypto.so.1
952 link path=usr/lib/$(ARCH64)/libsysevent.so \
953 target=../../../../lib/$(ARCH64)/libsysevent.so.1
954 link path=usr/lib/$(ARCH64)/libsysevent.so.1 \
955 target=../../../../lib/$(ARCH64)/libsysevent.so.1
956 link path=usr/lib/$(ARCH64)/libtermcap.so \
957 target=../../../../lib/$(ARCH64)/libtermcap.so.1
958 link path=usr/lib/$(ARCH64)/libtermcap.so.1 \
959 target=../../../../lib/$(ARCH64)/libtermcap.so.1
960 link path=usr/lib/$(ARCH64)/libtermplib.so \
961 target=../../../../lib/$(ARCH64)/libcurses.so.1
962 link path=usr/lib/$(ARCH64)/libtermplib.so.1 \
963 target=../../../../lib/$(ARCH64)/libcurses.so.1
964 link path=usr/lib/$(ARCH64)/libthread.so \
965 target=../../../../lib/$(ARCH64)/libthread.so.1
966 link path=usr/lib/$(ARCH64)/libthread.so.1 \
967 target=../../../../lib/$(ARCH64)/libthread.so.1
968 link path=usr/lib/$(ARCH64)/libthread_db.so \
969 target=../../../../lib/$(ARCH64)/libc_db.so.1
970 link path=usr/lib/$(ARCH64)/libthread_db.so.1 \
971 target=../../../../lib/$(ARCH64)/libc_db.so.1
972 link path=usr/lib/$(ARCH64)/libtsnet.so \
973 target=../../../../lib/$(ARCH64)/libtsnet.so.1
974 link path=usr/lib/$(ARCH64)/libtsnet.so.1 \
975 target=../../../../lib/$(ARCH64)/libtsnet.so.1
976 link path=usr/lib/$(ARCH64)/libtsol.so \
977 target=../../../../lib/$(ARCH64)/libtsol.so.2
978 link path=usr/lib/$(ARCH64)/libtsol.so.2 \
979 target=../../../../lib/$(ARCH64)/libtsol.so.2
980 link path=usr/lib/$(ARCH64)/libumem.so \
981 target=../../../../lib/$(ARCH64)/libumem.so.1
982 link path=usr/lib/$(ARCH64)/libumem.so.1 \
983 target=../../../../lib/$(ARCH64)/libumem.so.1
984 link path=usr/lib/$(ARCH64)/libuuid.so \

```

```

985 target=../../../../lib/$(ARCH64)/libuuid.so.1
986 link path=usr/lib/$(ARCH64)/libuuid.so.1 \
987 target=../../../../lib/$(ARCH64)/libuuid.so.1
988 $(i386_ONLY)link path=usr/lib/$(ARCH64)/libutil.so \
989 target=../../../../lib/$(ARCH64)/libutil.so.1
990 link path=usr/lib/$(ARCH64)/libutil.so.1 \
991 target=../../../../lib/$(ARCH64)/libutil.so.1
992 $(sparc_ONLY)link path=usr/lib/$(ARCH64)/libv12n.so target=libv12n.so.1
993 link path=usr/lib/$(ARCH64)/libvolmgt.so target=libvolmgt.so.1
994 link path=usr/lib/$(ARCH64)/libw.so target=../../../../lib/$(ARCH64)/libw.so.1
995 link path=usr/lib/$(ARCH64)/libw.so.1 target=../../../../lib/$(ARCH64)/libw.so.1
996 link path=usr/lib/$(ARCH64)/libwrap.so target=libwrap.so.1.0
997 link path=usr/lib/$(ARCH64)/libwrap.so.1 target=libwrap.so.1.0
998 link path=usr/lib/$(ARCH64)/libxnet.so \
999 target=../../../../lib/$(ARCH64)/libxnet.so.1
1000 link path=usr/lib/$(ARCH64)/libxnet.so.1 \
1001 target=../../../../lib/$(ARCH64)/libxnet.so.1
1002 link path=usr/lib/$(ARCH64)/liby.so target=liby.so.1
1003 link path=usr/lib/$(ARCH64)/libzoneinfo.so target=libzoneinfo.so.1
1004 link path=usr/lib/$(ARCH64)/nss_compat.so.1 \
1005 target=../../../../lib/$(ARCH64)/nss_compat.so.1
1006 link path=usr/lib/$(ARCH64)/nss_dns.so.1 \
1007 target=../../../../lib/$(ARCH64)/nss_dns.so.1
1008 link path=usr/lib/$(ARCH64)/nss_files.so.1 \
1009 target=../../../../lib/$(ARCH64)/nss_files.so.1
1010 link path=usr/lib/$(ARCH64)/nss_nis.so.1 \
1011 target=../../../../lib/$(ARCH64)/nss_nis.so.1
1012 link path=usr/lib/$(ARCH64)/nss_user.so.1 \
1013 target=../../../../lib/$(ARCH64)/nss_user.so.1
1014 link path=usr/lib/$(ARCH64)/straddr.so target=straddr.so.2
1015 link path=usr/lib/32 target=
1016 link path=usr/lib/64 target=$(ARCH64)
1017 link path=usr/lib/cfgadm/$(ARCH64)/ib.so target=ib.so.1
1018 link path=usr/lib/cfgadm/$(ARCH64)/pci.so target=pci.so.1
1019 $(i386_ONLY)link path=usr/lib/cfgadm/$(ARCH64)/sata.so target=sata.so.1
1020 link path=usr/lib/cfgadm/$(ARCH64)/scsi.so target=scsi.so.1
1021 link path=usr/lib/cfgadm/$(ARCH64)/shp.so target=shp.so.1
1022 link path=usr/lib/cfgadm/$(ARCH64)/usb.so target=usb.so.1
1023 link path=usr/lib/cfgadm/ib.so target=ib.so.1
1024 link path=usr/lib/cfgadm/pci.so target=pci.so.1
1025 $(i386_ONLY)link path=usr/lib/cfgadm/sata.so target=sata.so.1
1026 link path=usr/lib/cfgadm/scsi.so target=scsi.so.1
1027 link path=usr/lib/cfgadm/shp.so target=shp.so.1
1028 link path=usr/lib/cfgadm/usb.so target=usb.so.1
1029 link path=usr/lib/libadm.so target=lib/libadm.so.1
1030 link path=usr/lib/libadm.so.1 target=lib/libadm.so.1
1031 link path=usr/lib/libadutils.so target=libadutils.so.1
1032 link path=usr/lib/libaio.so target=lib/libaio.so.1
1033 link path=usr/lib/libaio.so.1 target=lib/libaio.so.1
1034 link path=usr/lib/libavl.so.1 target=lib/libavl.so.1
1035 link path=usr/lib/libbsdmalloc.so target=libbsdmalloc.so.1
1036 link path=usr/lib/libbsm.so target=lib/libbsm.so.1
1037 link path=usr/lib/libbsm.so.1 target=lib/libbsm.so.1
1038 link path=usr/lib/libc.so target=lib/libc.so.1
1039 link path=usr/lib/libc.so.1 target=lib/libc.so.1
1040 link path=usr/lib/libc_db.so target=lib/libc_db.so.1
1041 link path=usr/lib/libc_db.so.1 target=lib/libc_db.so.1
1042 link path=usr/lib/libcfgadm.so target=libcfgadm.so.1
1043 link path=usr/lib/libcmd.so target=libcmd.so.1
1044 link path=usr/lib/libcmdutils.so.1 target=lib/libcmdutils.so.1
1045 link path=usr/lib/libcommutil.so target=libcommutil.so.1
1046 link path=usr/lib/libcontract.so target=lib/libcontract.so.1
1047 link path=usr/lib/libcontract.so.1 target=lib/libcontract.so.1
1048 link path=usr/lib/libcrypt.so target=libcrypt.so.1
1049 link path=usr/lib/libcrypt_d.so target=libcrypt.so
1050 link path=usr/lib/libcrypt_d.so.1 target=libcrypt.so.1

```

```

1051 link path=usr/lib/libcrypt_i.so target=../libcrypt.so
1052 link path=usr/lib/libcrypt_i.so.1 target=../libcrypt.so.1
1053 link path=usr/lib/libctf.so target=../lib/libctf.so.1
1054 link path=usr/lib/libctf.so.1 target=../lib/libctf.so.1
1055 link path=usr/lib/libcurses.so target=../lib/libcurses.so.1
1056 link path=usr/lib/libcurses.so.1 target=../lib/libcurses.so.1
1057 link path=usr/lib/libdevice.so target=../lib/libdevice.so.1
1058 link path=usr/lib/libdevice.so.1 target=../lib/libdevice.so.1
1059 link path=usr/lib/libdevvid.so target=../lib/libdevvid.so.1
1060 link path=usr/lib/libdevvid.so.1 target=../lib/libdevvid.so.1
1061 link path=usr/lib/libdevinfo.so target=../lib/libdevinfo.so.1
1062 link path=usr/lib/libdevinfo.so.1 target=../lib/libdevinfo.so.1
1063 link path=usr/lib/libdhcpgent.so.1 target=../lib/libdhcpgent.so.1
1064 link path=usr/lib/libdhcputil.so.1 target=../lib/libdhcputil.so.1
1065 link path=usr/lib/libdisasm.so target=../libdisasm.so.1
1066 link path=usr/lib/libdl.so target=../lib/libdl.so.1
1067 link path=usr/lib/libdl.so.1 target=../lib/libdl.so.1
1068 link path=usr/lib/libdmpi.so target=../lib/libdmpi.so.1
1069 link path=usr/lib/libdmpi.so.1 target=../lib/libdmpi.so.1
1070 link path=usr/lib/libdoor.so target=../lib/libdoor.so.1
1071 link path=usr/lib/libdoor.so.1 target=../lib/libdoor.so.1
1072 link path=usr/lib/libefi.so target=../lib/libefi.so.1
1073 link path=usr/lib/libefi.so.1 target=../lib/libefi.so.1
1074 link path=usr/lib/libelf.so target=../lib/libelf.so.1
1075 link path=usr/lib/libelf.so.1 target=../lib/libelf.so.1
1076 link path=usr/lib/libexacct.so target=../lib/exacct.so.1
1077 $(i386_ONLY)link path=usr/lib/libfdisk.so target=../lib/libfdisk.so.1
1078 $(i386_ONLY)link path=usr/lib/libfdisk.so.1 target=../lib/libfdisk.so.1
1079 link path=usr/lib/libform.so target=../libform.so.1
1080 link path=usr/lib/libfstyp.so target=../libfstyp.so.1
1081 link path=usr/lib/libgen.so target=../lib/libgen.so.1
1082 link path=usr/lib/libgen.so.1 target=../lib/libgen.so.1
1083 link path=usr/lib/libhotplug.so target=../libhotplug.so.1
1084 link path=usr/lib/libidmap.so target=../libidmap.so.1
1085 link path=usr/lib/libinetutil.so.1 target=../lib/libinetutil.so.1
1086 link path=usr/lib/libintl.so target=../lib/libintl.so.1
1087 link path=usr/lib/libintl.so.1 target=../lib/libintl.so.1
1088 link path=usr/lib/libipmi.so target=../libipmi.so.1
1089 link path=usr/lib/libipp.so target=../libipp.so.1
1090 link path=usr/lib/libkstat.so target=../lib/libkstat.so.1
1091 link path=usr/lib/libkstat.so.1 target=../lib/libkstat.so.1
1092 link path=usr/lib/libkvm.so target=../libkvm.so.1
1093 link path=usr/lib/libl.so target=../libl.so.1
1094 link path=usr/lib/libldap.so target=../libldap.so.5
1095 link path=usr/lib/liblddbg.so.4 target=../lib/liblddbg.so.4
1096 link path=usr/lib/liblgrp.so target=../liblgrp.so.1
1097 link path=usr/lib/liblm.so target=../liblm.so.1
1098 link path=usr/lib/libmail.so target=../libmail.so.1
1099 link path=usr/lib/libmalloc.so target=../libmalloc.so.1
1100 link path=usr/lib/libmapmalloc.so target=../libmapmalloc.so.1
1101 link path=usr/lib/libmd.so target=../lib/libmd.so.1
1102 link path=usr/lib/libmd.so.1 target=../lib/libmd.so.1
1103 link path=usr/lib/libmd5.so target=../lib/libmd5.so.1
1104 link path=usr/lib/libmd5.so.1 target=../lib/libmd5.so.1
1105 link path=usr/lib/libmenu.so target=../lib/menu.so.1
1106 link path=usr/lib/libmp.so target=../lib/libmp.so.2
1107 link path=usr/lib/libmp.so.1 target=../lib/libmp.so.1
1108 link path=usr/lib/libmp.so.2 target=../lib/libmp.so.2
1109 link path=usr/lib/libmtmalloc.so target=../libmtmalloc.so.1
1110 link path=usr/lib/libnls.so target=../libnls.so.1
1111 link path=usr/lib/libnls1.so target=../lib/libnls1.so.1
1112 link path=usr/lib/libnls1.so.1 target=../lib/libnls1.so.1
1113 link path=usr/lib/libnvpair.so target=../lib/libnvpair.so.1
1114 link path=usr/lib/libnvpair.so.1 target=../lib/libnvpair.so.1
1115 link path=usr/lib/libpam.so target=../lib/libpam.so.1
1116 link path=usr/lib/libpam.so.1 target=../lib/libpam.so.1

```

```

1117 link path=usr/lib/libpanel.so target=../libpanel.so.1
1118 link path=usr/lib/libpkcs11.so target=../libpkcs11.so.1
1119 link path=usr/lib/libposix4.so target=../lib/librt.so.1
1120 link path=usr/lib/libposix4.so.1 target=../lib/librt.so.1
1121 link path=usr/lib/libproc.so target=../lib/libproc.so.1
1122 link path=usr/lib/libproc.so.1 target=../lib/libproc.so.1
1123 link path=usr/lib/libproject.so target=../libproject.so.1
1124 link path=usr/lib/libpthread.so target=../lib/libpthread.so.1
1125 link path=usr/lib/libpthread.so.1 target=../lib/libpthread.so.1
1126 link path=usr/lib/librcm.so target=../lib/librcm.so.1
1127 link path=usr/lib/librcm.so.1 target=../lib/librcm.so.1
1128 link path=usr/lib/libreparse.so target=../libreparse.so.1
1129 link path=usr/lib/libresolv.so target=../lib/libresolv.so.2
1130 link path=usr/lib/libresolv.so.1 target=../lib/libresolv.so.1
1131 link path=usr/lib/libresolv.so.2 target=../lib/libresolv.so.2
1132 link path=usr/lib/librestart.so.1 target=../lib/librestart.so.1
1133 link path=usr/lib/librpcsvc.so target=../lib/librpcsvc.so.1
1134 link path=usr/lib/librpcsvc.so.1 target=../lib/librpcsvc.so.1
1135 link path=usr/lib/librt.so target=../lib/librt.so.1
1136 link path=usr/lib/librt.so.1 target=../lib/librt.so.1
1137 link path=usr/lib/librtld.so.1 target=../lib/librtld.so.1
1138 link path=usr/lib/librtld_db.so target=../lib/librtld_db.so.1
1139 link path=usr/lib/librtld_db.so.1 target=../lib/librtld_db.so.1
1140 link path=usr/lib/libscf.so target=../lib/libscf.so.1
1141 link path=usr/lib/libscf.so.1 target=../lib/libscf.so.1
1142 link path=usr/lib/libsched.so target=../lib/libsched.so.1
1143 link path=usr/lib/libsectp.so target=../libsectp.so.1
1144 link path=usr/lib/libsec.so target=../lib/libsec.so.1
1145 link path=usr/lib/libsec.so.1 target=../lib/libsec.so.1
1146 link path=usr/lib/libsecdb.so target=../lib/libsecdb.so.1
1147 link path=usr/lib/libsecdb.so.1 target=../lib/libsecdb.so.1
1148 link path=usr/lib/libsendfile.so target=../lib/libsendfile.so.1
1149 link path=usr/lib/libsendfile.so.1 target=../lib/libsendfile.so.1
1150 link path=usr/lib/libsip.so target=../lib/libsip.so.1
1151 link path=usr/lib/libslmap.so target=../lib/libslmap.so.1
1152 link path=usr/lib/libmbios.so target=../lib/libmbios.so.1
1153 link path=usr/lib/libsocket.so target=../lib/libsocket.so.1
1154 link path=usr/lib/libsocket.so.1 target=../lib/libsocket.so.1
1155 link path=usr/lib/libsoftcrypto.so target=../lib/libsoftcrypto.so.1
1156 link path=usr/lib/libsys.so target=../lib/libsys.so.1
1157 link path=usr/lib/libsyssevent.so target=../lib/libsyssevent.so.1
1158 link path=usr/lib/libsyssevent.so.1 target=../lib/libsyssevent.so.1
1159 link path=usr/lib/libtermcap.so target=../lib/libtermcap.so.1
1160 link path=usr/lib/libtermcap.so.1 target=../lib/libtermcap.so.1
1161 link path=usr/lib/libtermmlib.so target=../lib/libtermmlib.so.1
1162 link path=usr/lib/libtermmlib.so.1 target=../lib/libtermmlib.so.1
1163 link path=usr/lib/libthread.so target=../lib/libthread.so.1
1164 link path=usr/lib/libthread.so.1 target=../lib/libthread.so.1
1165 link path=usr/lib/libthread_db.so target=../lib/libthread_db.so.1
1166 link path=usr/lib/libthread_db.so.1 target=../lib/libthread_db.so.1
1167 link path=usr/lib/libtsnet.so target=../lib/libtsnet.so.1
1168 link path=usr/lib/libtsnet.so.1 target=../lib/libtsnet.so.1
1169 link path=usr/lib/libtsol.so target=../lib/libtsol.so.2
1170 link path=usr/lib/libtsol.so.2 target=../lib/libtsol.so.2
1171 link path=usr/lib/libubemem.so target=../lib/libubemem.so.1
1172 link path=usr/lib/libubemem.so.1 target=../lib/libubemem.so.1
1173 link path=usr/lib/libuuid.so target=../lib/libuuid.so.1
1174 link path=usr/lib/libuuid.so.1 target=../lib/libuuid.so.1
1175 link path=usr/lib/libuutil.so.1 target=../lib/libuutil.so.1
1176 $(sparc_ONLY)link path=usr/lib/libv12n.so target=../lib/libv12n.so.1
1177 link path=usr/lib/libvolmgt.so target=../lib/libvolmgt.so.1
1178 link path=usr/lib/libw.so target=../lib/libw.so.1
1179 link path=usr/lib/libw.so.1 target=../lib/libw.so.1
1180 link path=usr/lib/libwrap.so target=../lib/libwrap.so.1.0
1181 link path=usr/lib/libwrap.so.1 target=../lib/libwrap.so.1.0
1182 link path=usr/lib/libxnet.so target=../lib/libxnet.so.1

```

```

1183 link path=usr/lib/libxnet.so.1 target=../lib/libxnet.so.1
1184 link path=usr/lib/liby.so target=../liby.so.1
1185 link path=usr/lib/libzoneinfo.so target=../libzoneinfo.so.1
1186 link path=usr/lib/lwp/${ARCH64}/libthread.so.1 \
1187     target=../lib/${ARCH64}/libthread.so.1
1188 link path=usr/lib/lwp/${ARCH64}/libthread_db.so.1 \
1189     target=../lib/${ARCH64}/libthread_db.so.1
1190 link path=usr/lib/lwp/32 target=
1191 link path=usr/lib/lwp/64 target=${ARCH64}
1192 link path=usr/lib/lwp/libthread.so.1 target=../libthread.so.1
1193 link path=usr/lib/lwp/libthread_db.so.1 target=../libthread_db.so.1
1194 link path=usr/lib/nss_compat.so.1 target=../lib/nss_compat.so.1
1195 link path=usr/lib/nss_dns.so.1 target=../lib/nss_dns.so.1
1196 link path=usr/lib/nss_files.so.1 target=../lib/nss_files.so.1
1197 link path=usr/lib/nss_nis.so.1 target=../lib/nss_nis.so.1
1198 link path=usr/lib/nss_user.so.1 target=../lib/nss_user.so.1
1199 link path=usr/lib/scsi/${ARCH64}/libscsi.so target=../libscsi.so.1
1200 link path=usr/lib/scsi/${ARCH64}/libsesc.so target=../libsesc.so.1
1201 link path=usr/lib/scsi/${ARCH64}/libsmp.so target=../libsmp.so.1
1202 link path=usr/lib/scsi/libscsi.so target=../libscsi.so.1
1203 link path=usr/lib/scsi/libsesc.so target=../libsesc.so.1
1204 link path=usr/lib/scsi/libsmp.so target=../libsmp.so.1
1205 link path=usr/lib/security/${ARCH64}/crypt_bsdbf.so target=../crypt_bsdbf.so.1
1206 link path=usr/lib/security/${ARCH64}/crypt_bsmd5.so \
1207     target=../crypt_bsmd5.so.1
1208 link path=usr/lib/security/${ARCH64}/crypt_sha256.so \
1209     target=../crypt_sha256.so.1
1210 link path=usr/lib/security/${ARCH64}/crypt_sha512.so \
1211     target=../crypt_sha512.so.1
1212 link path=usr/lib/security/${ARCH64}/crypt_sunmd5.so \
1213     target=../crypt_sunmd5.so.1
1214 link path=usr/lib/security/${ARCH64}/pam_allow.so target=../pam_allow.so.1
1215 link path=usr/lib/security/${ARCH64}/pam_authtok_check.so \
1216     target=../pam_authtok_check.so.1
1217 link path=usr/lib/security/${ARCH64}/pam_authtok_get.so \
1218     target=../pam_authtok_get.so.1
1219 link path=usr/lib/security/${ARCH64}/pam_authtok_store.so \
1220     target=../pam_authtok_store.so.1
1221 link path=usr/lib/security/${ARCH64}/pam_deny.so target=../pam_deny.so.1
1222 link path=usr/lib/security/${ARCH64}/pam_dhkeys.so target=../pam_dhkeys.so.1
1223 link path=usr/lib/security/${ARCH64}/pam_dial_auth.so \
1224     target=../pam_dial_auth.so.1
1225 link path=usr/lib/security/${ARCH64}/pam_ldap.so target=../pam_ldap.so.1
1226 link path=usr/lib/security/${ARCH64}/pam_list.so target=../pam_list.so.1
1227 link path=usr/lib/security/${ARCH64}/pam_passwd_auth.so \
1228     target=../pam_passwd_auth.so.1
1229 link path=usr/lib/security/${ARCH64}/pam_rhosts_auth.so \
1230     target=../pam_rhosts_auth.so.1
1231 link path=usr/lib/security/${ARCH64}/pam_roles.so target=../pam_roles.so.1
1232 link path=usr/lib/security/${ARCH64}/pam_sample.so target=../pam_sample.so.1
1233 link path=usr/lib/security/${ARCH64}/pam_timestamp.so \
1234     target=../pam_timestamp.so.1
1235 link path=usr/lib/security/${ARCH64}/pam_tsol_account.so \
1236     target=../pam_tsol_account.so.1
1237 link path=usr/lib/security/${ARCH64}/pam_unix_account.so \
1238     target=../pam_unix_account.so.1
1239 link path=usr/lib/security/${ARCH64}/pam_unix_auth.so \
1240     target=../pam_unix_auth.so.1
1241 link path=usr/lib/security/${ARCH64}/pam_unix_cred.so \
1242     target=../pam_unix_cred.so.1
1243 link path=usr/lib/security/${ARCH64}/pam_unix_session.so \
1244     target=../pam_unix_session.so.1
1245 link path=usr/lib/security/${ARCH64}/pkcs11_kernel.so \
1246     target=../pkcs11_kernel.so.1
1247 link path=usr/lib/security/${ARCH64}/pkcs11_softtoken.so \
1248     target=../pkcs11_softtoken.so.1

```

```

1249 link path=usr/lib/security/${ARCH64}/pkcs11_tpm.so target=../pkcs11_tpm.so.1
1250 link path=usr/lib/security/64 target=${ARCH64}
1251 link path=usr/lib/security/audit_binfile.so target=../audit_binfile.so.1
1252 link path=usr/lib/security/audit_remote.so target=../audit_remote.so.1
1253 link path=usr/lib/security/audit_syslog.so target=../audit_syslog.so.1
1254 link path=usr/lib/security/crypt_bsdbf.so target=../crypt_bsdbf.so.1
1255 link path=usr/lib/security/crypt_bsmd5.so target=../crypt_bsmd5.so.1
1256 link path=usr/lib/security/crypt_sha256.so target=../crypt_sha256.so.1
1257 link path=usr/lib/security/crypt_sha512.so target=../crypt_sha512.so.1
1258 link path=usr/lib/security/crypt_sunmd5.so target=../crypt_sunmd5.so.1
1259 link path=usr/lib/security/pam_allow.so target=../pam_allow.so.1
1260 link path=usr/lib/security/pam_authtok_check.so \
1261     target=../pam_authtok_check.so.1
1262 link path=usr/lib/security/pam_authtok_get.so target=../pam_authtok_get.so.1
1263 link path=usr/lib/security/pam_authtok_store.so \
1264     target=../pam_authtok_store.so.1
1265 link path=usr/lib/security/pam_deny.so target=../pam_deny.so.1
1266 link path=usr/lib/security/pam_dhkeys.so target=../pam_dhkeys.so.1
1267 link path=usr/lib/security/pam_dial_auth.so target=../pam_dial_auth.so.1
1268 link path=usr/lib/security/pam_ldap.so target=../pam_ldap.so.1
1269 link path=usr/lib/security/pam_list.so target=../pam_list.so.1
1270 link path=usr/lib/security/pam_passwd_auth.so target=../pam_passwd_auth.so.1
1271 link path=usr/lib/security/pam_rhosts_auth.so target=../pam_rhosts_auth.so.1
1272 link path=usr/lib/security/pam_roles.so target=../pam_roles.so.1
1273 link path=usr/lib/security/pam_sample.so target=../pam_sample.so.1
1274 link path=usr/lib/security/pam_timestamp.so target=../pam_timestamp.so.1
1275 link path=usr/lib/security/pam_tsol_account.so target=../pam_tsol_account.so.1
1276 link path=usr/lib/security/pam_unix_account.so target=../pam_unix_account.so.1
1277 link path=usr/lib/security/pam_unix_auth.so target=../pam_unix_auth.so.1
1278 link path=usr/lib/security/pam_unix_cred.so target=../pam_unix_cred.so.1
1279 link path=usr/lib/security/pam_unix_session.so target=../pam_unix_session.so.1
1280 link path=usr/lib/security/pkcs11_kernel.so target=../pkcs11_kernel.so.1
1281 link path=usr/lib/security/pkcs11_softtoken.so target=../pkcs11_softtoken.so.1
1282 link path=usr/lib/security/pkcs11_tpm.so target=../pkcs11_tpm.so.1
1283 link path=usr/lib/straddr.so target=../straddr.so.2
1284 link path=usr/xpg4/lib/${ARCH64}/libcurses.so target=libcurses.so.2
1285 link path=usr/xpg4/lib/64 target=${ARCH64}
1286 link path=usr/xpg4/lib/libcurses.so target=../libcurses.so.2
1287 #
1288 # libcurses.so needs to dlopen(3C) plugins from usr/lib/scsi/plugins/ses/vendor/,
1289 # a dependency which cannot be automatically derived
1290 #
1291 depend fmri=system/library/storage/scsi-plugins type=require

```