```
**********************************************************
     605 Wed May 20 11:30:07 2015
new/usr/src/cmd/make/Makefile.com
make: unifdef for SUNOS4_AND_AFTER (defined)
**********************************************************
```

```
   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 #

  12 # Copyright 2015, Richard Lowe.

  14 MAKE_INCLUDE= $(SRC)/cmd/make/include
  15 MAKE_DEFS= -DSYSV -DINTER
  15 MAKE_DEFS= -DSYSV -DINTER -DSUNOS4_AND_AFTER
  16 $(RELEASE_BUILD)MAKE_DEFS += -DNDEBUG
  17 CFLAGS += $(CCVERBOSE)
  18 CPPFLAGS += -I$(MAKE_INCLUDE) $(MAKE_DEFS)
```

```
**********************************************************
    3177 Wed May 20 11:30:08 2015
new/usr/src/cmd/make/bin/depvar.cc
make: unifdef for SUNOS4_AND_AFTER (defined)
**********************************************************
______unchanged_portion_omitted_

  46 typedef struct _Depvar  *Depvar;

  48 static  Depvar          depvar_list;
  49 static  Depvar          *bpatch = &depvar_list;
  50 static  Boolean         variant_deps;

  52 /*
  53  * Add a name to the list.
  54  */

  56 void
  57 depvar_add_to_list(Name name, Boolean cmdline)
  58 {
  59         Depvar          dv;

  61 #ifdef SUNOS4_AND_AFTER
  61         dv = ALLOC(Depvar);
  63 #else
  64         dv = (Depvar) Malloc(sizeof(struct _Depvar));
  65 #endif
  62         dv->name = name;
  63         dv->next = NULL;
  64         dv->cmdline = cmdline;
  65         *bpatch = dv;
  66         bpatch = &dv->next;
  67 }

  69 /*
  70  * The macro 'name' has been used in either the left-hand or
  71  * right-hand side of a dependency.  See if it is in the
  72  * list.  Two things are looked for.  Names given as args
  73  * to the -V list are checked so as to set the same/differ
  74  * output for the -P option.  Names given as macro=value
  75  * command-line args are checked and, if found, an NSE
  76  * warning is produced.
  77  */
  78 void
  79 depvar_dep_macro_used(Name name)
  80 {
  81         Depvar          dv;

  83         for (dv = depvar_list; dv != NULL; dv = dv->next) {
  84                 if (name == dv->name) {
  85 #ifdef NSE
  90 #ifdef SUNOS4_AND_AFTER
  86                         if (dv->cmdline) {
  92 #else
  93                         if (is_true(dv->cmdline)) {
  94 #endif
  87                                 nse_dep_cmdmacro(dv->name->string);
  88                         }
  89 #endif
  90                         variant_deps = true;
  91                         break;
  92                 }
  93         }
  94 }

  96 #ifdef NSE
```



```
  97 /*
  98  * The macro 'name' has been used in either the argument
  99  * to a cd before a recursive make.  See if it was
 100  * defined on the command-line and, if so, complain.
 101  */
 102 void
 103 depvar_rule_macro_used(Name name)
 104 {
 105         Depvar          dv;

 107         for (dv = depvar_list; dv != NULL; dv = dv->next) {
 108                 if (name == dv->name) {
 117 #ifdef SUNOS4_AND_AFTER
 109                         if (dv->cmdline) {
 119 #else
 120                         if (is_true(dv->cmdline)) {
 121 #endif
 110                                 nse_rule_cmdmacro(dv->name->string);
 111                         }
 112                         break;
 113                 }
 114         }
 115 }
______unchanged_portion_omitted_
```

```
**********************************************************
   12541 Wed May 20 11:30:08 2015
new/usr/src/cmd/make/bin/nse.cc
make: unifdef for SUNOS4_AND_AFTER (defined)
**********************************************************
_____unchanged_portion_omitted_
```

```
 65 static Nse_suffix       sufx_hdr;
 66 static int              our_exit_status;

 68 static void             nse_warning(void);
 69 static Boolean          nse_gettoken(wchar_t **, wchar_t *);

 71 /*
 72  * Given a command that has just recursed to a sub make
 73  * try to determine if it cd'ed to a directory that was
 74  * defined by a make variable imported from the shell
 75  * environment or a variable with backquotes in it.
 76  * This routine will find something like:
 77  *      cd $(DIR); $(MAKE)
 78  * where DIR is imported from the shell environment.
 79  * However it well not find:
 80  *      CD = cd
 81  *              $(CD) $(DIR); $(MAKE)
 82  * or
 83  *      CD = cd $(DIR)
 84  *              $(CD); $(MAKE)
 85  *
 86  * This routine also checks for recursion to the same
 87  * directory.
 88  */
 89 void
 90 nse_check_cd(Property prop)
 91 {
 92         wchar_t         tok[512];
 93         wchar_t         *p;
 94         wchar_t         *our_template;
 95         int             len;
 96         Boolean         cd;
 97 #ifdef SUNOS4_AND_AFTER
 97         String_rec      string;
 99 #else
100         String          string;
101 #endif
 98         Name            name;
 99         Name            target;
100         struct  Line    *line;
101         struct  Recursive *r;
102         Property        recurse;
103         wchar_t         strbuf[STRING_BUFFER_LENGTH];
104         wchar_t         tmpbuf[STRING_BUFFER_LENGTH];

106 #ifdef LTEST
107         printf("In nse_check_cd, nse = %d, nse_did_recursion = %d\n", nse, nse_d
108 #endif
113 #ifdef SUNOS4_AND_AFTER
109         if (!nse_did_recursion || !nse) {
115 #else
116         if (is_false(nse_did_recursion) || is_false(flag.nse)) {
117 #endif
110 #ifdef LTEST
111                 printf ("returning,  nse = %d,  nse_did_recursion = %d\n", nse,
112 #endif
113                 return;
114         }
115         line = &prop->body.line;
116 #ifdef LTEST
```



```
117         printf("string = %s\n", line->command_template->command_line->string_mb)
118 #endif

120         wscpy(tmpbuf, line->command_template->command_line->string);
121         our_template = tmpbuf;
122         cd = false;
123         while (nse_gettoken(&our_template, tok)) {
124 #ifdef LTEST
125                 printf("in gettoken loop\n");
126 #endif
135 #ifdef SUNOS4_AND_AFTER
127                 if (IS_WEQUAL(tok, (wchar_t *) "cd")) {
137 #else
138                 if (is_equal(tok, "cd")) {
139 #endif
128                         cd = true;
129                 } else if (cd && tok[0] == '$') {
130                         nse_backquote_seen = NULL;
131                         nse_shell_var_used = NULL;
132                         nse_watch_vars = true;
145 #ifdef SUNOS4_AND_AFTER
133                         INIT_STRING_FROM_STACK(string, strbuf);
134                         name = GETNAME(tok, FIND_LENGTH);
148 #else
149                         init_string_from_stack(string, strbuf);
150                         name = getname(tok, FIND_LENGTH);
151 #endif
135                         expand_value(name, &string, false);
136                         nse_watch_vars = false;

138 #ifdef LTEST
139                         printf("cd = %d, tok = $\n", cd);
140 #endif
141                         /*
142                          * Try to trim tok to just
143                          * the variable.
144                          */
145                         if (nse_shell_var_used != NULL) {
146                                 nse_warning();
147                                 fprintf(stderr, "\tMake invoked recursively by c
148                                     nse_shell_var_used->string_mb,
149                                     line->command_template->command_line->string
150                         }
151                         if (nse_backquote_seen != NULL) {
152                                 nse_warning();
153                                 fprintf(stderr, "\tMake invoked recursively by c
154                                     nse_backquote_seen->string_mb,
155                                     line->command_template->command_line->string
156                         }
157                         cd = false;
158                 } else if (cd && nse_backquotes(tok)) {
159                         nse_warning();
160                         fprintf(stderr, "\tMake invoked recursively by cd'ing to
161                             line->command_template->command_line->string_mb);
162                         cd = false;
163                 } else {
164                         cd = false;
165                 }
166         }

168         /*
169          * Now check for recursion to ".".
170          */
171         if (primary_makefile != NULL) {
172                 target = prop->body.line.target;
173                 recurse = get_prop(target->prop, recursive_prop);
```

```
174                 while (recurse != NULL) {
175                         r = &recurse->body.recursive;
193 #ifdef SUNOS4_AND_AFTER
176                         if (IS_WEQUAL(r->directory->string, (wchar_t *) ".") &&
177                             !IS_WEQUAL(r->makefiles->name->string,
178                             primary_makefile->string)) {
197 #else
198                         if (is_equal(r->directory->string, ".") &&
199                             !is_equal(r->makefiles->name->string,
200                             primary_makefile->string)) {
201 #endif
179                                 nse_warning();
180                                 fprintf(stderr, "\tRecursion to makefile ‘%s’ in
181                                     r->makefiles->name->string_mb,
182                                     line->command_template->command_line->string
183                         }
184                         recurse = get_prop(recurse->next, recursive_prop);
185                 }
186         }
187 }

189 /*
190  * Print an NSE make warning line.
191  * If the -P flag was given then consider this a fatal
192  * error, otherwise, just a warning.
193  */
194 static void
195 nse_warning(void)
196 {
220 #ifdef SUNOS4_AND_AFTER
197         if (report_dependencies_level > 0) {
222 #else
223         if (is_true(flag.report_dependencies)) {
224 #endif
198                 our_exit_status = 1;
199         }
200         if (primary_makefile != NULL) {
201                 fprintf(stderr, "make: NSE warning from makefile %s/%s:\n",
202                         get_current_path(), primary_makefile->string_mb);
203         } else {
204                 fprintf(stderr, "make: NSE warning from directory %s:\n",
205                         get_current_path());
206         }
207 }
```

_____***unchanged_portion_omitted_***

```
238 /*
239  * Given a dependency and a target, see if the dependency
240  * is an SCCS file.  Check for the last component of its name
241  * beginning with "s." and the component before that being "SCCS".
242  * The NSE does not consider a source file to be derived from
243  * an SCCS file.
244  */
245 void
246 nse_check_sccs(wchar_t *targ, wchar_t *dep)
247 {
248         wchar_t         *slash;
249         wchar_t         *p;

278 #ifdef SUNOS4_AND_AFTER
251         if (!nse) {
280 #else
281         if (is_false(flag.nse)) {
282 #endif
252                 return;
253         }
```



```
285 #ifdef SUNOS4_AND_AFTER
254         slash = wsrchr(dep, (int) slash_char);
287 #else
288         slash = rindex(dep, '/');
289 #endif
255         if (slash == NULL) {
256                 return;
257         }
258         if (slash[1] != 's' || slash[2] != '.') {
259                 return;
260         }

262         /*
263          * Find the next to last filename component.
264          */
265         for (p = slash - 1; p >= dep; p--) {
266                 if (*p == '/') {
267                         break;
268                 }
269         }
270         p++;
306 #ifdef SUNOS4_AND_AFTER
271         MBSTOWCS(wcs_buffer, "SCCS/");
272         if (IS_WEQUALN(p, wcs_buffer, wslen(wcs_buffer))) {
309 #else
310         if (is_equaln(p, "SCCS/", 5)) {
311 #endif
273                 nse_warning();
274                 WCSTOMBS(mbs_buffer, targ);
275                 WCSTOMBS(mbs_buffer2, dep);
276                 fprintf(stderr, "\tFile ‘%s’ depends upon SCCS file ‘%s’\n",
277                         mbs_buffer, mbs_buffer2);
278         }
279         return;
280 }

282 /*
283  * Given a filename check to see if it has 2 backquotes in it.
284  * Complain about this because the shell expands the backquotes
285  * but make does not so the files always appear to be out of date.
286  */
287 void
288 nse_check_file_backquotes(wchar_t *file)
289 {
329 #ifdef SUNOS4_AND_AFTER
290         if (!nse) {
331 #else
332         if (is_false(flag.nse)) {
333 #endif
291                 return;
292         }
293         if (nse_backquotes(file)) {
294                 nse_warning();
295                 WCSTOMBS(mbs_buffer, file);
296                 fprintf(stderr, "\tFilename \"%s\" has backquotes in it\n",
297                         mbs_buffer);
298         }
299 }

301 /*
302  * Return true if the string has two backquotes in it.
303  */
304 Boolean
305 nse_backquotes(wchar_t *str)
306 {
307         wchar_t         *bq;
```

```
352 #ifdef SUNOS4_AND_AFTER
309         bq = wschr(str, (int) backquote_char);
310         if (bq) {
311                 bq = wschr(&bq[1], (int) backquote_char);
356 #else
357         bq = index(str, '`');
358         if (bq) {
359                 bq = index(&bq[1], '`');
360 #endif
312                 if (bq) {
313                         return true;
314                 }
315         }
316         return false;
317 }

319 /*
320  * A macro that was defined on the command-line was found to affect the
321  * set of dependencies.  The NSE "target explode" will not know about
322  * this and will not get the same set of dependencies.
323  */
324 void
325 nse_dep_cmdmacro(wchar_t *macro)
326 {
376 #ifdef SUNOS4_AND_AFTER
327         if (!nse) {
378 #else
379         if (is_false(flag.nse)) {
380 #endif
328                 return;
329         }
330         nse_warning();
331         WCSTOMBS(mbs_buffer, macro);
332         fprintf(stderr, "\tVariable `%s' is defined on the command-line and\n\ta
333                 mbs_buffer);
334 }

336 /*
337  * A macro that was defined on the command-line was found to
338  * be part of the argument to a cd before a recursive make.
339  * This make cause the make to recurse to different places
340  * depending upon how it is invoked.
341  */
342 void
343 nse_rule_cmdmacro(wchar_t *macro)
344 {
398 #ifdef SUNOS4_AND_AFTER
345         if (!nse) {
400 #else
401         if (is_false(flag.nse)) {
402 #endif
346                 return;
347         }
348         nse_warning();
349         WCSTOMBS(mbs_buffer, macro);
350         fprintf(stderr, "\tMake invoked recursively by cd'ing to a directory\n\t
351                 mbs_buffer);
352 }

354 /*
355  * A dependency has been found with a wildcard in it.
356  * This causes the NSE problems because the set of dependencies
357  * can change without changing the Makefile.
358  */
359 void
```



```
360 nse_wildcard(wchar_t *targ, wchar_t *dep)
361 {
419 #ifdef SUNOS4_AND_AFTER
362         if (!nse) {
421 #else
422         if (is_false(flag.nse)) {
423 #endif
363                 return;
364         }
365         nse_warning();
366         WCSTOMBS(mbs_buffer, targ);
367         WCSTOMBS(mbs_buffer2, dep);
368         fprintf(stderr, "\tFile `%s' has a wildcard in dependency `%s'\n",
369                 mbs_buffer, mbs_buffer2);
370 }

372 /*
373  * Read in the list of suffixes that are interpreted as source
374  * files.
375  */
376 void
377 nse_init_source_suffixes(void)
378 {
379         FILE            *fp;
380         wchar_t         suffix[100];
381         Nse_suffix      sufx;
382         Nse_suffix      *bpatch;

384         fp = fopen(TARG_SUFX, "r");
385         if (fp == NULL) {
386                 return;
387         }
388         bpatch = &sufx_hdr;
389         while (fscanf(fp, "%s %*s", suffix) == 1) {
451 #ifdef SUNOS4_AND_AFTER
390                 sufx = ALLOC(Nse_suffix);
391                 sufx->suffix = wscpy(ALLOC_WC(wslen(suffix) + 1), suffix);
454 #else
455                 sufx = alloc(Nse_suffix);
456                 sufx->suffix = strcpy(malloc(strlen(suffix) + 1), suffix);
457 #endif
392                 sufx->next = NULL;
393                 *bpatch = sufx;
394                 bpatch = &sufx->next;
395         }
396         fclose(fp);
397 }

399 /*
400  * Check if a derived file (something with a dependency) appears
401  * to be a source file (by its suffix) but has no rule to build it.
402  * If so, complain.
403  *
404  * This generally arises from the old-style of make-depend that
405  * produces:
406  *      foo.c:  foo.h
407  */
408 void
409 nse_check_derived_src(Name target, wchar_t *dep, Cmd_line command_template)
410 {
411         Nse_suffix      sufx;
412         wchar_t         *suffix;
413         wchar_t         *depsufx;

481 #ifdef SUNOS4_AND_AFTER
415         if (!nse) {
```

```
#else
        if (is_false(flag.nse)) {
#endif
                return;
        }
#ifdef SUNOS4_AND_AFTER
        if (target->stat.is_derived_src) {
#else
        if (is_true(target->stat.is_derived_src)) {
#endif
                return;
        }
        if (command_template != NULL) {
                return;
        }
#ifdef SUNOS4_AND_AFTER
         suffix = wsrchr(target->string, (int) period_char );
#else
        suffix = rindex(target->string, '.');
#endif
        if (suffix != NULL) {
                for (sufx = sufx_hdr; sufx != NULL; sufx = sufx->next) {
#ifdef SUNOS4_AND_AFTER
                        if (IS_WEQUAL(sufx->suffix, suffix)) {
#else
                        if (is_equal(sufx->suffix, suffix)) {
#endif
                                nse_warning();
                                WCSTOMBS(mbs_buffer, dep);
                                fprintf(stderr, "\tProbable source file '%s' app
                                        target->string_mb, mbs_buffer);
                                break;
                        }
                }
        }
}

/*
 * See if a target is a potential source file and has no
 * dependencies and no rule but shows up on the right-hand
 * side.  This tends to occur from old "make depend" output.
 */
void
nse_check_no_deps_no_rule(Name target, Property line, Property command)
{
        Nse_suffix      sufx;
        wchar_t         *suffix;

#ifdef SUNOS4_AND_AFTER
        if (!nse) {
#else
        if (is_false(flag.nse)) {
#endif
                return;
        }
#ifdef SUNOS4_AND_AFTER
        if (target->stat.is_derived_src) {
#else
        if (is_true(target->stat.is_derived_src)) {
#endif
                return;
        }
        if (line != NULL && line->body.line.dependencies != NULL) {
                return;
        }
#ifdef SUNOS4_AND_AFTER
```



```
        if (command->body.line.sccs_command) {
#else
        if (is_true(command->body.line.sccs_command)) {
#endif
                return;
        }
#ifdef SUNOS4_AND_AFTER
        suffix = wsrchr(target->string, (int) period_char);
#else
        suffix = rindex(target->string, '.');
#endif
        if (suffix != NULL) {
                for (sufx = sufx_hdr; sufx != NULL; sufx = sufx->next) {
#ifdef SUNOS4_AND_AFTER
                        if (IS_WEQUAL(sufx->suffix, suffix)) {
#else
                        if (is_equal(sufx->suffix, suffix)) {
#endif
                                if (command->body.line.command_template == NULL)
                                        nse_warning();
                                        fprintf(stderr, "\tProbable source file
                                                target->string_mb);
                                }
                        }
                }
        }
}

/*
 * Detected a situation where a recursive make derived a file
 * without using a makefile.
 */
void
nse_no_makefile(Name target)
{
#ifdef SUNOS4_AND_AFTER
        if (!nse) {
#else
        if (is_false(flag.nse)) {
#endif
                return;
        }
        nse_warning();
        fprintf(stderr, "Recursive make to derive %s did not use a makefile\n",
                target->string_mb);
}
______unchanged_portion_omitted_
```

```
**********************************************************
    8831 Wed May 20 11:30:08 2015
new/usr/src/cmd/make/bin/nse_printdep.cc
make: unifdef for SUNOS4_AND_AFTER (defined)
**********************************************************
```

```
/*
 * CDDL HEADER START
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 *
 * CDDL HEADER END
 */
/*
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 */

/*
 * Included files
 */
#include <mk/defs.h>
#include <mksh/misc.h>          /* get_prop() */

/*
 * File table of contents
 */
void   print_dependencies(register Name target, register Property line);
static void     print_deps(register Name target, register Property line);
static void     print_more_deps(Name target, Name name);
static void     print_filename(Name name);
static Boolean  should_print_dep(Property line);
static void     print_forest(Name target);
static void     print_deplist(Dependency head);
void            print_value(register Name value, Daemon daemon);
static void     print_rule(register Name target);
static  void    print_rec_info(Name target);
static Boolean  is_out_of_date(Property line);
extern void depvar_print_results (void);
extern int printf (const char *, ...);
extern int _flsbuf (unsigned int, FILE *);

/*
 *      print_dependencies(target, line)
 *
 *      Print all the dependencies of a target. First print all the Makefiles.
 *      Then print all the dependencies. Finally, print all the .INIT
 *      dependencies.
 *
 *      Parameters:
 *              target          The target we print dependencies for
 *              line            We get the dependency list from here
 *
 *      Global variables used:
```



```
 *              done            The Name ".DONE"
 *              init            The Name ".INIT"
 *              makefiles_used  List of all makefiles read
 */
void
print_dependencies(register Name target, register Property line)
{
        Dependency      dp;
        static Boolean  makefiles_printed = false;

#ifdef SUNOS4_AND_AFTER
        if (target_variants) {
#else
        if (is_true(flag.target_variants)) {
#endif
                depvar_print_results();
        }

        if (!makefiles_printed) {
                /*
                 * Search the makefile list for the primary makefile,
                 * then print it and its inclusions.  After that go back
                 * and print the default.mk file and its inclusions.
                 */
                for (dp = makefiles_used; dp != NULL; dp = dp->next) {
                        if (dp->name == primary_makefile) {
                                break;
                        }
                }
                if (dp) {
                        print_deplist(dp);
                        for (dp = makefiles_used; dp != NULL; dp = dp->next) {
                                if (dp->name == primary_makefile) {
                                        break;
                                }
                                (void)printf(" %s", dp->name->string_mb);
                        }
                }
                (void) printf("\n");
                makefiles_printed = true;
        }
        print_deps(target, line);
#ifdef SUNOS4_AND_AFTER
/*
        print_more_deps(target, init);
        print_more_deps(target, done);
 */
        if (target_variants) {
#else
        print_more_deps(target, cached_names.init);
        print_more_deps(target, cached_names.done);
        if (is_true(flag.target_variants)) {
#endif
                print_forest(target);
        }
}
```

_____***unchanged_portion_omitted_***

```
/*
 *      print_deps(target, line, go_recursive)
 *
 *      Print a regular dependency list.  Append to this information which
 *      indicates whether or not the target is recursive.
 *
 *      Parameters:
 *              target          target to print dependencies for
```

```
 *              line            We get the dependency list from here
 *              go_recursive    Should we show all dependencies recursively?
 *
 *      Global variables used:
 *              recursive_name  The Name ".RECURSIVE", printed
 */
static void
print_deps(register Name target, register Property line)
{
        register Dependency     dep;

#ifdef SUNOS4_AND_AFTER
        if ((target->dependency_printed) ||
            (target == force)) {
#else
        if (is_true(target->dependency_printed)) {
#endif
                return;
        }
        target->dependency_printed = true;

        /* only print entries that are actually derived and are not leaf
         * files and are not the result of sccs get.
         */
        if (should_print_dep(line)) {
#ifdef NSE
                nse_check_no_deps_no_rule(target, line, line);
#endif
                if ((report_dependencies_level == 2) ||
                    (report_dependencies_level == 4)) {
                        if (is_out_of_date(line)) {
                                (void) printf("1 ");
                        } else {
                                (void) printf("0 ");
                        }
                }
                print_filename(target);
                (void) printf(":\t");
                print_deplist(line->body.line.dependencies);
                print_rec_info(target);
                (void) printf("\n");
                for (dep = line->body.line.dependencies;
                     dep != NULL;
                     dep = dep->next) {
                        print_deps(dep->name,
                                get_prop(dep->name->prop, line_prop));
                }
        }
}
```

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```
/*
 *      should_print_dep(line)
 *
 *      Test if we should print the dependencies of this target.
 *      The line must exist and either have children dependencies
 *      or have a command that is not an SCCS command.
 *
 *      Return value:
 *                              true if the dependencies should be printed
 *
 *      Parameters:
 *              line            We get the dependency list from here
 *
 *      Global variables used:
 */
```



```
static Boolean
should_print_dep(Property line)
{
        if (line == NULL) {
                return false;
        }
        if (line->body.line.dependencies != NULL) {
                return true;
        }
#ifdef SUNOS4_AND_AFTER
        if (line->body.line.sccs_command) {
#else
        if (is_true(line->body.line.sccs_command)) {
#endif
                return false;
        }
        return true;
}

/*
 * Print out the root nodes of all the dependency trees
 * in this makefile.
 */
static void
print_forest(Name target)
{
        Name_set::iterator np, e;
        Property        line;

        for (np = hashtab.begin(), e = hashtab.end(); np != e; np++) {
#ifdef SUNOS4_AND_AFTER
                        if (np->is_target && !np->has_parent && np != target) {
#else
                        if (is_true(np->is_target) &&
                            is_false(np->has_parent) &&
                            np != target) {
#endif
                                (void) doname_check(np, true, false, false);
                                line = get_prop(np->prop, line_prop);
                                printf("-\n");
                                print_deps(np, line);
                        }
        }
}

#ifndef SUNOS4_AND_AFTER
printdesc()
{
        Name_set::iterator      p, e;
        register Property       prop;
        register Dependency     dep;
        register Cmd_line       rule;
        Percent                 percent, percent_depe;

        /* Default target */
        if (default_target_to_build != NULL) {
                print_rule(default_target_to_build);
                default_target_to_build->dependency_printed= true;
        };
        (void)printf("\n");

        /* .AR_REPLACE */
        if (ar_replace_rule != NULL) {
                (void)printf("%s:\n", cached_names.ar_replace->string_mb);
                for (rule= ar_replace_rule; rule != NULL; rule= rule->next)
                        (void)printf("\t%s\n", rule->command_line->string_mb);
```

```
349         };

351         /* .DEFAULT */
352         if (default_rule != NULL) {
353                 (void)printf("%s:\n", cached_names.default_rule->string_mb);
354                 for (rule= default_rule; rule != NULL; rule= rule->next)
355                         (void)printf("\t%s\n", rule->command_line->string_mb);
356         };

358         /* .IGNORE */
359         if (is_true(flag.ignore_errors))
360                 (void)printf("%s:\n", cached_names.ignore->string_mb);

362         /* .KEEP_STATE: */
363         if (is_true(flag.keep_state))
364                 (void)printf("%s:\n\n", cached_names.dot_keep_state->string_mb);

366         /* .PRECIOUS */
367         (void)printf("%s: ", cached_names.precious->string_mb);
368         for (p = hashtab.begin(), e = hashtab.end(); p != e; p++)
369                         if (is_true(p->stat.is_precious | all_precious))
370                                 (void)printf("%s ", p->string_mb);
371         (void)printf("\n");

373         /* .SCCS_GET */
374         if (sccs_get_rule != NULL) {
375                 (void)printf("%s:\n", cached_names.sccs_get->string_mb);
376                 for (rule= sccs_get_rule; rule != NULL; rule= rule->next)
377                         (void)printf("\t%s\n", rule->command_line->string_mb);
378         };

380         /* .SILENT */
381         if (is_true(flag.silent))
382                 (void)printf("%s:\n", cached_names.silent->string_mb);

384         /* .SUFFIXES: */
385         (void)printf("%s: ", cached_names.suffixes->string_mb);
386         for (dep= suffixes; dep != NULL; dep= dep->next) {
387                 (void)printf("%s ", dep->name->string_mb);
388                 build_suffix_list(dep->name);
389         };
390         (void)printf("\n\n");

392         /* % rules */
393         for (percent= percent_list; percent != NULL; percent= percent->next) {
394                 (void) printf("%s:", percent->name->string_mb);

396                 for (percent_depe= percent->dependencies; percent_depe != NULL;
397                         (void) printf(" %s", percent_depe->name->string_mb);

399                 (void) printf("\n");

401                 for (rule= percent->command_template; rule != NULL; rule= rule->
402                         (void)printf("\t%s\n", rule->command_line->string_mb);
403         };

405         /* Suffix rules */
406         for (p = hashtab.begin(), e = hashtab.end(); p != e; p++)
407                         if (is_false(p->dependency_printed) && (p->string[0] ==
408                                 print_rule(p);
409                                 p->dependency_printed= true;
410                         };

412         /* Macro assignments */
413         for (p = hashtab.begin(), e = hashtab.end(); p != e; p++)
414                         if (((prop= get_prop(p->prop, macro_prop)) != NULL) &&
```



```
415                                 (prop->body.macro.value != NULL)) {
416                                     (void)printf("%s", p->string_mb);
417                                     print_value(prop->body.macro.value,
418                                                 prop->body.macro.daemon);
419                         };
420         (void)printf("\n");

422         /* Delays */
423         for (p = hashtab.begin(), e = hashtab.end(); p != e; p++)
424                         for (prop= get_prop(p->prop, conditional_prop);
425                              prop != NULL;
426                              prop= get_prop(prop->next, conditional_prop)) {
427                                     (void)printf("%s := %s",
428                                                  p->string_mb,
429                                                  prop->body.conditional.name->string
430                                     print_value(prop->body.conditional.value, no_dae
431                         };
432         (void)printf("\n");

434         /* All other dependencies */
435         for (p = hashtab.begin(), e = hashtab.end(); p != e; p++)
436                         if (is_false(p->dependency_printed) && (p->colons != no_
437                                 print_rule(p);
438         (void)printf("\n");
439         exit(0);
440 }
441 #endif
```

```
305 /*
306  *      This is a set  of routines for dumping the internal make state
307  *      Used for the -p option
308  */
309 void
310 print_value(register Name value, Daemon daemon)
311
450 #ifdef SUNOS4_AND_AFTER
312
452 #else
453
454 #endif
313 {
314         Chain                   cp;

316         if (value == NULL)
317                 (void)printf("=\n");
318         else
319                 switch (daemon) {
320                     case no_daemon:
321                         (void)printf("= %s\n", value->string_mb);
322                         break;
323                     case chain_daemon:
324                         for (cp= (Chain) value; cp != NULL; cp= cp->next)
325                                 (void)printf(cp->next == NULL ? "%s" : "%s ",
326                                              cp->name->string_mb);
327                         (void)printf("\n");
328                         break;
329                 };
330 }
```

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