

```

*****
1936 Tue Apr 30 23:38:05 2019
new/usr/src/lib/libc/port/gen/posix_memalign.c
10880 posix_memalign() should avoid clobbering return parameter on failure
*****
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
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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 */

22 /*
23  * Copyright 2008 Sun Microsystems, Inc. All rights reserved.
24  * Use is subject to license terms.
25  */

```

```
27 #include "lint.h"
```

```
29 #include <sys/sysmacros.h>
27 #pragma ident "%Z%M% %I% %E% SMI"
```

```
29 #include "lint.h"
31 #include <stdlib.h>
32 #include <errno.h>
```

```

34 /*
35  * SUSv3 - aligned memory allocation
36  *
37  * From the SUSv3 specification:
38  *   The value of alignment shall be a power
39  *   of two multiple of sizeof (void *).
40  * This is enforced below.
41  *
42  * From the SUSv3 specification:
43  *   If the size of the space requested is 0, the behavior
44  *   is implementation-defined; the value returned in memptr
45  *   shall be either a null pointer or a unique pointer.
46  * We choose always to return a null pointer in this case.
47  * (Not all implementations of memalign() behave this way.)
48  */
49 int
50 posix_memalign(void **memptr, size_t alignment, size_t size)
51 {
52     void *ptr = NULL;
52     int error = 0;

54     if (alignment == 0 ||
55         (alignment & (sizeof (void *) - 1)) != 0 ||
56         (alignment & (alignment - 1)) != 0)
57         error = EINVAL;
58     else if (size != 0 &&

```

```

59         (ptr = memalign(alignment, size)) == NULL)
60         error = ENOMEM;

54     if ((alignment == 0) || !ISP2(alignment) ||
55         (alignment & (sizeof (void *) - 1)) != 0) {
56         return (EINVAL);
57     } else if (size == 0) {
58         *memptr = NULL;
59         return (0);
60     } else {
61         if ((ptr = memalign(alignment, size)) == NULL) {
62             return (ENOMEM);
63         } else {
64 #endif /* ! codereview */
65             *memptr = ptr;
66             return (0);
67         }
68     }
62     return (error);
69 }
_____unchanged_portion_omitted_____

```

new/usr/src/pkg/manifests/system-test-libctest.mf

1

```
*****
12201 Tue Apr 30 23:38:05 2019
new/usr/src/pkg/manifests/system-test-libctest.mf
10880 posix_memalign() should avoid clobbering return parameter on failure
*****
```

```
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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
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10 #
11 #
12 #
13 # Copyright (c) 2012 by Delphix. All rights reserved.
14 # Copyright 2014, OmniTI Computer Consulting, Inc. All rights reserved.
15 # Copyright 2015 Garrett D'Amore <garrett@damore.org>
16 # Copyright 2018 Joyent, Inc.
17 #
18 #
19 set name=pkg.fmri value=pkg:/system/test/libctest@$(PKGVERS)
20 set name=pkg.description value="C Library Unit Tests"
21 set name=pkg.summary value="C Library Unit Test Suite"
22 set name=info.classification \
23     value=org.opensolaris.category.2008:Development/System
24 set name=variant.arch value=$(ARCH)
25 dir path=opt/libc-tests
26 dir path=opt/libc-tests/bin
27 dir path=opt/libc-tests/cfg
28 dir path=opt/libc-tests/cfg/symbols
29 dir path=opt/libc-tests/runfiles
30 dir path=opt/libc-tests/tests
31 dir path=opt/libc-tests/tests/random
32 dir path=opt/libc-tests/tests/regex
33 dir path=opt/libc-tests/tests/regex/data
34 dir path=opt/libc-tests/tests/select
35 dir path=opt/libc-tests/tests/symbols
36 dir path=usr group=sys
37 dir path=usr/lib
38 dir path=usr/lib/locale
39 dir path=usr/lib/locale/zz_AA.UTF-8
40 dir path=usr/lib/locale/zz_AA.UTF-8/LC_COLLATE
41 dir path=usr/lib/locale/zz_AA.UTF-8/LC_CTYPE
42 dir path=usr/lib/locale/zz_AA.UTF-8/LC_MESSAGES
43 dir path=usr/lib/locale/zz_AA.UTF-8/LC_MONETARY
44 dir path=usr/lib/locale/zz_AA.UTF-8/LC_NUMERIC
45 dir path=usr/lib/locale/zz_AA.UTF-8/LC_TIME
46 file path=opt/libc-tests/README mode=0444
47 file path=opt/libc-tests/bin/libctest mode=0555
48 file path=opt/libc-tests/cfg/README mode=0444
49 file path=opt/libc-tests/cfg/compilation.cfg mode=0444
50 file path=opt/libc-tests/cfg/symbols/README mode=0444
51 file path=opt/libc-tests/cfg/symbols/assert_h.cfg mode=0444
52 file path=opt/libc-tests/cfg/symbols/ctype_h.cfg mode=0444
53 file path=opt/libc-tests/cfg/symbols/dirent_h.cfg mode=0444
54 file path=opt/libc-tests/cfg/symbols/fcntl_h.cfg mode=0444
55 file path=opt/libc-tests/cfg/symbols/locale_h.cfg mode=0444
56 file path=opt/libc-tests/cfg/symbols/math_h.cfg mode=0444
57 file path=opt/libc-tests/cfg/symbols/netdb_h.cfg mode=0444
58 file path=opt/libc-tests/cfg/symbols/pthread_h.cfg mode=0444
59 file path=opt/libc-tests/cfg/symbols/signal_h.cfg mode=0444
60 file path=opt/libc-tests/cfg/symbols/stdalign_h.cfg mode=0444
61 file path=opt/libc-tests/cfg/symbols/stddef_h.cfg mode=0444
```

new/usr/src/pkg/manifests/system-test-libctest.mf

2

```
62 file path=opt/libc-tests/cfg/symbols/stdio_h.cfg mode=0444
63 file path=opt/libc-tests/cfg/symbols/stdlib_h.cfg mode=0444
64 file path=opt/libc-tests/cfg/symbols/stdnoreturn_h.cfg mode=0444
65 file path=opt/libc-tests/cfg/symbols/string_h.cfg mode=0444
66 file path=opt/libc-tests/cfg/symbols/strings_h.cfg mode=0444
67 file path=opt/libc-tests/cfg/symbols/sys_stat_h.cfg mode=0444
68 file path=opt/libc-tests/cfg/symbols/sys_time_h.cfg mode=0444
69 file path=opt/libc-tests/cfg/symbols/sys_timeb_h.cfg mode=0444
70 file path=opt/libc-tests/cfg/symbols/threads_h.cfg mode=0444
71 file path=opt/libc-tests/cfg/symbols/time_h.cfg mode=0444
72 file path=opt/libc-tests/cfg/symbols/ucontext_h.cfg mode=0444
73 file path=opt/libc-tests/cfg/symbols/unistd_h.cfg mode=0444
74 file path=opt/libc-tests/cfg/symbols/wchar_h.cfg mode=0444
75 file path=opt/libc-tests/cfg/symbols/wctype_h.cfg mode=0444
76 file path=opt/libc-tests/runfiles/default.run mode=0444
77 file path=opt/libc-tests/tests/aligned_alloc.32 mode=0555
78 file path=opt/libc-tests/tests/aligned_alloc.64 mode=0555
79 file path=opt/libc-tests/tests/c11_threads.32 mode=0555
80 file path=opt/libc-tests/tests/c11_threads.64 mode=0555
81 file path=opt/libc-tests/tests/c11_tss.32 mode=0555
82 file path=opt/libc-tests/tests/c11_tss.64 mode=0555
83 file path=opt/libc-tests/tests/call_once.32 mode=0555
84 file path=opt/libc-tests/tests/call_once.64 mode=0555
85 file path=opt/libc-tests/tests/catopen mode=0555
86 file path=opt/libc-tests/tests/endiian.32 mode=0555
87 file path=opt/libc-tests/tests/endiian.64 mode=0555
88 file path=opt/libc-tests/tests/env-7076.32 mode=0555
89 file path=opt/libc-tests/tests/env-7076.64 mode=0555
90 file path=opt/libc-tests/tests/fnmatch.32 mode=0555
91 file path=opt/libc-tests/tests/fnmatch.64 mode=0555
92 file path=opt/libc-tests/tests/fpround_test mode=0555
93 file path=opt/libc-tests/tests/fpround_test. $(ARCH) mode=0555
94 file path=opt/libc-tests/tests/fpround_test. $(ARCH64) mode=0555
95 file path=opt/libc-tests/tests/memset_s.32 mode=0555
96 file path=opt/libc-tests/tests/memset_s.64 mode=0555
97 file path=opt/libc-tests/tests/newlocale_test mode=0555
98 file path=opt/libc-tests/tests/newlocale_test. $(ARCH) mode=0555
99 file path=opt/libc-tests/tests/newlocale_test. $(ARCH64) mode=0555
100 file path=opt/libc-tests/tests/nl_langinfo_test mode=0555
101 file path=opt/libc-tests/tests/nl_langinfo_test. $(ARCH) mode=0555
102 file path=opt/libc-tests/tests/nl_langinfo_test. $(ARCH64) mode=0555
103 file path=opt/libc-tests/tests/posix_memalign.32 mode=0555
104 file path=opt/libc-tests/tests/posix_memalign.64 mode=0555
105 #endif /* ! codereview */
106 file path=opt/libc-tests/tests/printf-6961.64 mode=0555
107 file path=opt/libc-tests/tests/printf-9511.32 mode=0555
108 file path=opt/libc-tests/tests/printf-9511.64 mode=0555
109 file path=opt/libc-tests/tests/priv_gettext mode=0555
110 file path=opt/libc-tests/tests/psignal mode=0555
111 file path=opt/libc-tests/tests/psignal-5097.32 mode=0555
112 file path=opt/libc-tests/tests/psignal-5097.64 mode=0555
113 file path=opt/libc-tests/tests/pthread_attr_get_np mode=0555
114 file path=opt/libc-tests/tests/quick_exit mode=0555
115 file path=opt/libc-tests/tests/quick_exit_order.32 mode=0555
116 file path=opt/libc-tests/tests/quick_exit_order.64 mode=0555
117 file path=opt/libc-tests/tests/quick_exit_status.32 mode=0555
118 file path=opt/libc-tests/tests/quick_exit_status.64 mode=0555
119 file path=opt/libc-tests/tests/random/arc4key.ksh mode=0555
120 file path=opt/libc-tests/tests/random/arc4random mode=0555
121 file path=opt/libc-tests/tests/random/arc4random_fork mode=0555
122 file path=opt/libc-tests/tests/random/arc4random_forkall mode=0555
123 file path=opt/libc-tests/tests/random/arc4random_forksig mode=0555
124 file path=opt/libc-tests/tests/random/arc4random_prefork mode=0555
125 file path=opt/libc-tests/tests/random/arc4random_preforkall mode=0555
126 file path=opt/libc-tests/tests/random/arc4random_preforksigs mode=0555
127 file path=opt/libc-tests/tests/random/arc4random_rekey mode=0555
```

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128 file path=opt/libc-tests/tests/random/chacha mode=0555
129 file path=opt/libc-tests/tests/random/getentropy mode=0555
130 file path=opt/libc-tests/tests/random/getrandom mode=0555
131 file path=opt/libc-tests/tests/random/getrandred mode=0555
132 file path=opt/libc-tests/tests/random/inz_child mode=0555
133 file path=opt/libc-tests/tests/random/inz_inval mode=0555
134 file path=opt/libc-tests/tests/random/inz_mlock mode=0555
135 file path=opt/libc-tests/tests/random/inz_region mode=0555
136 file path=opt/libc-tests/tests/random/inz_split mode=0555
137 file path=opt/libc-tests/tests/random/inz_split_vpp mode=0555
138 file path=opt/libc-tests/tests/random/inz_vpp mode=0555
139 file path=opt/libc-tests/tests/regex/data/basic.dat mode=0444
140 file path=opt/libc-tests/tests/regex/data/basic.out mode=0444
141 file path=opt/libc-tests/tests/regex/data/categorize.dat mode=0444
142 file path=opt/libc-tests/tests/regex/data/categorize.out mode=0444
143 file path=opt/libc-tests/tests/regex/data/forcedassoc.dat mode=0444
144 file path=opt/libc-tests/tests/regex/data/forcedassoc.out mode=0444
145 file path=opt/libc-tests/tests/regex/data/leftassoc.dat mode=0444
146 file path=opt/libc-tests/tests/regex/data/leftassoc.out mode=0444
147 file path=opt/libc-tests/tests/regex/data/nullsubexpr.dat mode=0444
148 file path=opt/libc-tests/tests/regex/data/nullsubexpr.out mode=0444
149 file path=opt/libc-tests/tests/regex/data/repetition.dat mode=0444
150 file path=opt/libc-tests/tests/regex/data/repetition.out mode=0444
151 file path=opt/libc-tests/tests/regex/data/rightassoc.dat mode=0444
152 file path=opt/libc-tests/tests/regex/data/rightassoc.out mode=0444
153 file path=opt/libc-tests/tests/regex/regex_test mode=0555
154 file path=opt/libc-tests/tests/regex/testregex mode=0555
155 file path=opt/libc-tests/tests/select/select.sh mode=0555
156 file path=opt/libc-tests/tests/select/select_test mode=0555
157 file path=opt/libc-tests/tests/set_constraint_handler_s.32 mode=0555
158 file path=opt/libc-tests/tests/set_constraint_handler_s.64 mode=0555
159 file path=opt/libc-tests/tests/strcoll-strxfrm-6907.32 mode=0555
160 file path=opt/libc-tests/tests/strcoll-strxfrm-6907.64 mode=0555
161 file path=opt/libc-tests/tests/strerror mode=0555
162 file path=opt/libc-tests/tests/symbols/setup mode=0555
163 file path=opt/libc-tests/tests/symbols/symbols_test.$(ARCH) mode=0555
164 file path=opt/libc-tests/tests/symbols/symbols_test.$(ARCH64) mode=0555
165 file path=opt/libc-tests/tests/symbols/thread_name mode=0555
166 file path=opt/libc-tests/tests/timespec_get.32 mode=0555
167 file path=opt/libc-tests/tests/timespec_get.64 mode=0555
168 file path=opt/libc-tests/tests/wcsncasecmp-7344.32 mode=0555
169 file path=opt/libc-tests/tests/wcsncasecmp-7344.64 mode=0555
170 file path=opt/libc-tests/tests/wcsncasecmp-7350.32 mode=0555
171 file path=opt/libc-tests/tests/wcsncasecmp-7350.64 mode=0555
172 file path=opt/libc-tests/tests/wcsncasecmp.32 mode=0555
173 file path=opt/libc-tests/tests/wcsncasecmp.64 mode=0555
174 file path=opt/libc-tests/tests/wcsrtombs_test mode=0555
175 file path=opt/libc-tests/tests/wcsrtombs_test.$(ARCH) mode=0555
176 file path=opt/libc-tests/tests/wcsrtombs_test.$(ARCH64) mode=0555
177 file path=opt/libc-tests/tests/wctype_test mode=0555
178 file path=opt/libc-tests/tests/wctype_test.$(ARCH) mode=0555
179 file path=opt/libc-tests/tests/wctype_test.$(ARCH64) mode=0555
180 file path=usr/lib/locale/zz_AA.UTF-8/LC_COLLATE/LCL_DATA mode=0444
181 file path=usr/lib/locale/zz_AA.UTF-8/LC_CTYPE/LCL_DATA mode=0444
182 file path=usr/lib/locale/zz_AA.UTF-8/LC_MESSAGES/LCL_DATA mode=0444
183 file path=usr/lib/locale/zz_AA.UTF-8/LC_MESSAGES/SUNW_OST_OSLIB.mo mode=0444
184 file path=usr/lib/locale/zz_AA.UTF-8/LC_MESSAGES/priv_names mode=0444
185 file path=usr/lib/locale/zz_AA.UTF-8/LC_MONETARY/LCL_DATA mode=0444
186 file path=usr/lib/locale/zz_AA.UTF-8/LC_NUMERIC/LCL_DATA mode=0444
187 file path=usr/lib/locale/zz_AA.UTF-8/LC_TIME/LCL_DATA mode=0444
188 hardlink path=opt/libc-tests/tests/symbols/assert_h target=setup
189 hardlink path=opt/libc-tests/tests/symbols/ctype_h target=setup
190 hardlink path=opt/libc-tests/tests/symbols/dirent_h target=setup
191 hardlink path=opt/libc-tests/tests/symbols/fcntl_h target=setup
192 hardlink path=opt/libc-tests/tests/symbols/locale_h target=setup
193 hardlink path=opt/libc-tests/tests/symbols/math_h target=setup

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194 hardlink path=opt/libc-tests/tests/symbols/netdb_h target=setup
195 hardlink path=opt/libc-tests/tests/symbols/pthread_h target=setup
196 hardlink path=opt/libc-tests/tests/symbols/signal_h target=setup
197 hardlink path=opt/libc-tests/tests/symbols/stdalign_h target=setup
198 hardlink path=opt/libc-tests/tests/symbols/stddef_h target=setup
199 hardlink path=opt/libc-tests/tests/symbols/stdio_h target=setup
200 hardlink path=opt/libc-tests/tests/symbols/stdlib_h target=setup
201 hardlink path=opt/libc-tests/tests/symbols/stdnoreturn_h target=setup
202 hardlink path=opt/libc-tests/tests/symbols/string_h target=setup
203 hardlink path=opt/libc-tests/tests/symbols/strings_h target=setup
204 hardlink path=opt/libc-tests/tests/symbols/sys_stat_h target=setup
205 hardlink path=opt/libc-tests/tests/symbols/sys_time_h target=setup
206 hardlink path=opt/libc-tests/tests/symbols/sys_timeb_h target=setup
207 hardlink path=opt/libc-tests/tests/symbols/threads_h target=setup
208 hardlink path=opt/libc-tests/tests/symbols/time_h target=setup
209 hardlink path=opt/libc-tests/tests/symbols/ucontext_h target=setup
210 hardlink path=opt/libc-tests/tests/symbols/unistd_h target=setup
211 hardlink path=opt/libc-tests/tests/symbols/wchar_h target=setup
212 hardlink path=opt/libc-tests/tests/symbols/wctype_h target=setup
213 license lic_CDDL license=lic_CDDL
214 license usr/src/test/libc-tests/tests/regex/THIRDPARTYLICENSE \
215     license=usr/src/test/libc-tests/tests/regex/THIRDPARTYLICENSE
216 depend fmri=locale/ar type=require
217 depend fmri=locale/de type=require
218 depend fmri=locale/en type=require
219 depend fmri=locale/en-extra type=require
220 depend fmri=locale/ja type=require
221 depend fmri=locale/ru type=require
222 depend fmri=system/test/testrunner type=require

```

new/usr/src/test/libc-tests/runfiles/default.run

1

```
*****
3703 Tue Apr 30 23:38:06 2019
new/usr/src/test/libc-tests/runfiles/default.run
10880 posix_memalign() should avoid clobbering return parameter on failure
*****
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 #
13 # Copyright (c) 2012 by Delphix. All rights reserved.
14 # Copyright 2014 Garrett D'Amore <garrett@damore.org>
15 # Copyright 2018 Joyent, Inc.
16 #
17 #
18 [DEFAULT]
19 pre =
20 verbose = False
21 quiet = False
22 timeout = 60
23 post =
24 outputdir = /var/tmp/test_results
25 #
26 [/opt/libc-tests/tests/fpround_test]
27 [/opt/libc-tests/tests/newlocale_test]
28 [/opt/libc-tests/tests/nl_langinfo_test]
29 [/opt/libc-tests/tests/wcsrtombs_test]
30 [/opt/libc-tests/tests/wctype_test]
31 #
32 [/opt/libc-tests/tests/strcoll-strxfrm-6907.32]
33 [/opt/libc-tests/tests/strcoll-strxfrm-6907.64]
34 [/opt/libc-tests/tests/wcsncascmp.32]
35 [/opt/libc-tests/tests/wcsncascmp.64]
36 [/opt/libc-tests/tests/wcsncascmp-7344.32]
37 [/opt/libc-tests/tests/wcsncascmp-7344.64]
38 [/opt/libc-tests/tests/wcsncascmp-7350.32]
39 [/opt/libc-tests/tests/wcsncascmp-7350.64]
40 #
41 [/opt/libc-tests/tests/random/getrandom]
42 [/opt/libc-tests/tests/random/getentropy]
43 [/opt/libc-tests/tests/random/chacha]
44 [/opt/libc-tests/tests/random/inz_child]
45 [/opt/libc-tests/tests/random/inz_inval]
46 [/opt/libc-tests/tests/random/inz_mlock]
47 [/opt/libc-tests/tests/random/inz_region]
48 [/opt/libc-tests/tests/random/inz_split]
49 [/opt/libc-tests/tests/random/inz_split_vpp]
50 [/opt/libc-tests/tests/random/inz_vpp]
51 [/opt/libc-tests/tests/random/arc4random]
52 [/opt/libc-tests/tests/random/arc4random_fork]
53 [/opt/libc-tests/tests/random/arc4random_prefork]
54 [/opt/libc-tests/tests/random/arc4random_forkall]
55 [/opt/libc-tests/tests/random/arc4random_preforkall]
56 [/opt/libc-tests/tests/random/arc4random_forksigs]
57 [/opt/libc-tests/tests/random/arc4random_preforksigs]
58 [/opt/libc-tests/tests/random/arc4key.ksh]
59 #
60 [/opt/libc-tests/tests/regex/regex_test]
```

new/usr/src/test/libc-tests/runfiles/default.run

2

```
62 [/opt/libc-tests/tests/select/select.sh]
63 timeout = 60
64 #
65 [/opt/libc-tests/tests/aligned_alloc.32]
66 [/opt/libc-tests/tests/aligned_alloc.64]
67 [/opt/libc-tests/tests/c11_threads.32]
68 [/opt/libc-tests/tests/c11_threads.64]
69 [/opt/libc-tests/tests/c11_tss.32]
70 [/opt/libc-tests/tests/c11_tss.64]
71 [/opt/libc-tests/tests/call_once.32]
72 [/opt/libc-tests/tests/call_once.64]
73 [/opt/libc-tests/tests/catopen]
74 [/opt/libc-tests/tests/endian.32]
75 [/opt/libc-tests/tests/endian.64]
76 [/opt/libc-tests/tests/env-7076.32]
77 [/opt/libc-tests/tests/env-7076.64]
78 [/opt/libc-tests/tests/fnmatch.32]
79 [/opt/libc-tests/tests/fnmatch.64]
80 [/opt/libc-tests/tests/memset_s.32]
81 [/opt/libc-tests/tests/memset_s.64]
82 [/opt/libc-tests/tests/posix_memalign.32]
83 [/opt/libc-tests/tests/posix_memalign.64]
84 #endif /* ! codereview */
85 [/opt/libc-tests/tests/printf-6961.64]
86 [/opt/libc-tests/tests/printf-9511.32]
87 [/opt/libc-tests/tests/printf-9511.64]
88 [/opt/libc-tests/tests/priv_gettext]
89 [/opt/libc-tests/tests/psignal]
90 [/opt/libc-tests/tests/quick_exit]
91 [/opt/libc-tests/tests/set_constraint_handler_s.32]
92 [/opt/libc-tests/tests/set_constraint_handler_s.64]
93 [/opt/libc-tests/tests/strerror]
94 [/opt/libc-tests/tests/thread_name]
95 [/opt/libc-tests/tests/timespec_get.32]
96 [/opt/libc-tests/tests/timespec_get.64]
97 #
98 [/opt/libc-tests/tests/pthread_attr_get_np]
99 #
100 [/opt/libc-tests/tests/symbols]
101 pre = setup
102 tests = [
103     'assert_h',
104     'ctype_h',
105     'dirent_h',
106     'fcntl_h',
107     'locale_h',
108     'math_h',
109     'netdb_h',
110     'pthread_h',
111     'signal_h',
112     'stdalign_h',
113     'stddef_h',
114     'stdio_h',
115     'stdlib_h',
116     'stdnoreturn_h',
117     'string_h',
118     'strings_h',
119     'sys_stat_h',
120     'sys_time_h',
121     'sys_timeb_h',
122     'time_h',
123     'threads_h',
124     'ucontext_h',
125     'unistd_h',
126     'wchar_h',
127     'wctype_h'
```

`new/usr/src/test/libc-tests/runfiles/default.run`

3

128]

```

*****
2468 Tue Apr 30 23:38:06 2019
new/usr/src/test/libc-tests/tests/Makefile
10880 posix_memalign() should avoid clobbering return parameter on failure
*****
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 #
13 # Copyright (c) 2012 by Delphix. All rights reserved.
14 # Copyright 2015 Garrett D'Amore <garrett@damore.org>
15 # Copyright (c) 2018, Joyent, Inc.
16 #
17 #
18 SUBDIRS = \
19     catopen \
20     fpround \
21     newlocale \
22     nl_langinfo \
23     priv_gettext \
24     random \
25     regex \
26     select \
27     strerror \
28     symbols \
29     threads \
30     wcsrtombs \
31     wctype
32 #
33 PROGS = \
34     aligned_alloc \
35     c11_threads \
36     c11_tss \
37     call_once \
38     endian \
39     env-7076 \
40     fnmatch \
41     memset_s \
42     posix_memalign \
43 #endif /* ! codereview */
44     printf-9511 \
45     psignal-5097 \
46     quick_exit_order \
47     quick_exit_status \
48     set_constraint_handler_s \
49     strcoll-strxfrm-6907 \
50     timespec_get \
51     wcsncasecmp \
52     wcsncasecmp-7344 \
53     wcsncasecmp-7350
54 #
55 SCRIPTS = \
56     quick_exit \
57     psignal
58 #
59 CPPFLAGS += -D_REENTRANT
60 #
61 # needs work

```

```

62 SMOFF += all_func_returns,snprintf_overflow
63 #
64 PROGS32 = $(PROGS:%=%.32)
65 PROGS64 = \
66     $(PROGS:%=%.64) \
67     printf-6961.64
68 #
69 aligned_alloc.32 :=      LDLIBS += -lproc
70 aligned_alloc.64 :=      LDLIBS64 += -lproc
71 posix_memalign.32 :=     LDLIBS += -lproc
72 posix_memalign.64 :=     LDLIBS64 += -lproc
73 #endif /* ! codereview */
74 #
75 memset_s.32 :=          CPPFLAGS += -D__STDC_WANT_LIB_EXT1__=1
76 memset_s.64 :=          CPPFLAGS += -D__STDC_WANT_LIB_EXT1__=1
77 set_constraint_handler_s.32 := CPPFLAGS += -D__STDC_WANT_LIB_EXT1__=1
78 set_constraint_handler_s.64 := CPPFLAGS += -D__STDC_WANT_LIB_EXT1__=1
79 #
80 ROOTOPTDIR = $(ROOT)/opt/libc-tests/tests
81 ROOTOPTPROGS = $(PROGS32:%=$(ROOTOPTDIR)/%) \
82     $(PROGS64:%=$(ROOTOPTDIR)/%) \
83     $(SCRIPTS:%=$(ROOTOPTDIR)/%)
84 #
85 include $(SRC)/cmd/Makefile.cmd
86 #
87 all := TARGET = all
88 install := TARGET = install
89 clean := TARGET = clean
90 clobber := TARGET = clobber
91 lint := TARGET = lint
92 #
93 .KEEP_STATE:
94 #
95 install: $(SUBDIRS) $(ROOTOPTPROGS)
96 #
97 all: $(SUBDIRS) $(PROGS32) $(PROGS64)
98 #
99 clean lint: $(SUBDIRS)
100 #
101 $(ROOTOPTPROGS): $(PROGS32) $(PROGS64) $(ROOTOPTDIR)
102 #
103 $(ROOTOPTDIR):
104     $(INS.dir)
105 #
106 $(ROOTOPTDIR)/%: %
107     $(INS.file)
108 #
109 $(ROOTOPTDIR)/%: %.ksh
110     $(INS.rename)
111 #
112 %.64: %.c
113     $(LINK64.c) -o $@ $< $(LDLIBS64)
114     $(POST_PROCESS)
115 #
116 %.32: %.c
117     $(LINK.c) -o $@ $< $(LDLIBS)
118     $(POST_PROCESS)
119 #
120 clobber: $(SUBDIRS)
121     $(RM) $(PROGS32) $(PROGS64)
122 #
123 $(SUBDIRS): FRC
124     @cd $@; pwd; $(MAKE) $(TARGET)
125 #
126 FRC:

```

```

*****
2321 Tue Apr 30 23:38:07 2019
new/usr/src/test/libc-tests/tests/posix_memalign.c
10880 posix_memalign() should avoid clobbering return parameter on failure
*****
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 /*
13  * Copyright 2016 Joyent, Inc.
14 */

16 /*
17  * Basic tests for posix_memalign(3C). Note that we test ENOMEM failure by
18  * relying on the implementation of the current libc malloc. Specifically we go
19  * through and add a mapping so we can't expand the heap and then use it up. If
20  * the memory allocator is ever changed, this test will start failing, at which
21  * point, it may not be worth the cost of keeping it around.
22 */

24 #include <stdlib.h>
25 #include <errno.h>
26 #include <libproc.h>
27 #include <sys/sysmacros.h>
28 #include <sys/mman.h>
29 #include <sys/debug.h>

31 int
32 main(void)
33 {
34     pstatus_t status;
35     /*
36      * We use a non-NULL value, so we can verify that failure does not
37      * change the value of 'buf'
38      */
39     void *sentinel = (void *)0xbad00000;
40     void *buf = sentinel;
41     int err = 0;

43     /*
44      * Alignment must be sizeof (void *) (word) aligned.
45      */
46     err = posix_memalign(&buf, sizeof (void *) - 1, 16);
47     VERIFY3S(err, ==, EINVAL);
48     VERIFY3P(buf, ==, sentinel);

50     err = posix_memalign(&buf, sizeof (void *) + 1, 16);
51     VERIFY3S(err, ==, EINVAL);
52     VERIFY3P(buf, ==, sentinel);

54     err = posix_memalign(&buf, 23, 16);
55     VERIFY3S(err, ==, EINVAL);
56     VERIFY3P(buf, ==, sentinel);

58     err = posix_memalign(&buf, sizeof (void *), 16);
59     VERIFY3S(err, ==, 0);
60     VERIFY3B(IS_P2ALIGNED(buf, sizeof (void *)), ==, B_TRUE);
61     VERIFY3P(buf, !=, sentinel);

```

```

62     VERIFY3P(buf, !=, NULL);
63     free(buf);
64     buf = sentinel;

66     /*
67      * Cause ENOMEM
68      */
69     VERIFY0(proc_get_status(getpid(), &status));
70     VERIFY3P(mmap((caddr_t)P2ROUNDUP(status.pr_brkbase +
71     status.pr_brksize, 0x1000), 0x1000,
72     PROT_READ, MAP_ANON | MAP_FIXED | MAP_PRIVATE, -1, 0),
73     !=, (void *)-1);

75     for (;;) {
76         if (malloc(16) == NULL)
77             break;
78     }

81     for (;;) {
82         if (posix_memalign(&buf, sizeof (void *), 16) == ENOMEM)
83             break;
84     }

86     buf = sentinel;
87     err = posix_memalign(&buf, sizeof (void *), 16);
88     VERIFY3S(err, ==, ENOMEM);
89     VERIFY3P(buf, ==, sentinel);

91     return (0);
92 }
93 #endif /* ! codereview */

```