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*****
1978 Tue Aug 27 13:52:38 2019
new/usr/src/man/man3c/thrd_join.3c
11628 typos detected by mandoc style
*****
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9 .\" http://www.illumos.org/license/CDDL.
10 .\"
11 .\"
12 .\" Copyright 2016 Joyent, Inc.
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14 .Dd "Aug 27, 2019"
14 .Dd "Jan 13, 2015"
15 .Dt THR_JOIN 3C
16 .Os
17 .Sh NAME
18 .Nm thrd_join
19 .Nd wait for thread termination
20 .Sh SYNOPSIS
21 .In threads.h
22 .Ft int
23 .Fo thrd_join
24 .Fa "thrd_t thrd"
25 .Fa "int *res"
26 .Fc
27 .Sh DESCRIPTION
28 The
29 .Fn thrd_join
30 function suspends the execution of the current thread and waits for the
30 function suspends the execution of the current thread and waits for the
31 thread indicated by
32 .Fa thrd
33 to terminate and stores the exit status, as set by a call to
34 .Xr thrd_exit 3C ,
35 for that thread in
36 .Fa res ,
37 if
38 .Fa res
39 is non-null.
40 The
41 .Fa thrd
42 argument must be a member of the current process and it cannot be
43 detached.
44 If
45 .Fa thrd
46 has already terminated and another caller has not called
47 .Fn thrd_join
48 then the exit status will be returned to the caller without blocking
49 execution of the thread.
50 .Pp
51 If multiple threads call
52 .Fn thrd_join
53 on the same thread, then both will be suspended until that thread
54 terminates; however, only one thread will return successfully and obtain
55 the actual status and the other will instead return with an error.
56 .Pp
57 For additional information on the thread joining interfaces supported by
58 the system, see
59 .Xr pthread_join 3C

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60 and
61 .Xr thrd_join 3C .
62 .Sh RETURN VALUES
62 .Sh RETURN_VALUES
63 Upon successful completion, the
64 .Fn thrd_join
65 function returns
66 .Sy thrd_success
67 and if
68 .Fa res
69 is a non-null pointer, it will be filled in with the exit status of
70 .Fa thrd .
71 If an error occurs,
72 .Sy thrd_error
73 will be returned.
74 .Sh INTERFACE STABILITY
75 .Sy Standard
76 .Sh MT-LEVEL
77 .Sy MT-Safe
78 .Sh SEE ALSO
79 .Xr pthread_join 3C ,
80 .Xr thrd_create 3C ,
81 .Xr thrd_detach 3C ,
82 .Xr attributes 5 ,
83 .Xr threads 5

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*****
4620 Tue Aug 27 13:52:38 2019
new/usr/src/man/man3ext/SUNW_C_GetMechSession.3ext
11628 typos detected by mandoc style
*****
1 \" te
2.\" Copyright (c) 2005, Sun Microsystems, Inc. All Rights Reserved.
3.\" The contents of this file are subject to the terms of the Common Development
4.\" You can obtain a copy of the license at usr/src/OPENSOLARIS.LICENSE or http:
5.\" When distributing Covered Code, include this CDDL HEADER in each file and in
6.TH SUNW_C_GETMECHSESSION 3EXT "Aug 27, 2019"
6.TH SUNW_C_GETMECHSESSION 3EXT "April 9, 2016"
7.SH NAME
8 SUNW_C_GetMechSession, SUNW_C_KeyToObject \- PKCS#11 Cryptographic Framework
9 functions
10.SH SYNOPSIS
11.LP
11.nf
12 cc [ \fIflag \&.\|.|\fR ] \fIfile\fR\&.\|.|\fR \fB-lpkcs11\fR [ \fIlibrary\&.\|
13 #include <security/cryptoki.h>
14 #include <security/pkcs11.h>

16 \fBCK_RV\fR \fBSUNW_C_GetMechSession\fR(\fBCK_MECHANISM_TYPE\fR \fImech\fR,
17     \fBCK_SESSION_HANDLE_PTR\fR \fIhSession\fR);
18 .fi

20.LP
21.nf
22 \fBCK_RV\fR \fBSUNW_C_KeyToObject\fR(\fBCK_SESSION_HANDLE\fR \fIhSession\fR,
23     \fBCK_MECHANISM_TYPE\fR \fImech\fR, \fBconst void *\fR \fIrawkey\fR, \fBsize
24     \fBCK_OBJECT_HANDLE_PTR\fR \fIobj\fR);
25 .fi

27.SH DESCRIPTION
29.LP
28 These functions implement the RSA PKCS#11 v2.20 specification by using plug-ins
29 to provide the slots.
30.sp
31.LP
32 The \fBSUNW_C_GetMechSession()\fR function initializes the PKCS#11
33 cryptographic framework and performs all necessary calls to Standard PKCS#11
34 functions (see \fBlibpkcs11\fR(3LIB)) to create a session capable of providing
35 operations on the requested mechanism. It is not necessary to call
36 \fBCK_Initialize()\fR or \fBCK_GetSlotList()\fR before the first call to
38 \fBCK_Initialize()\fR or \fBCK_GetSlotList()\fR before the first call to
37 \fBSUNW_C_GetMechSession()\fR.
38.sp
39.LP
40 If the \fBSUNW_C_GetMechSession()\fR function is called multiple times, it will
41 return a new session each time without re-initializing the framework. If it is
43 return a new session each time without re-initializing the framework. If it is
42 unable to return a new session, \fBCKR_SESSION_COUNT\fR is returned.
43.sp
44.LP
45 The \fBCK_CloseSession()\fR function should be called to release the session
46 when it is no longer required.
47.sp
48.LP
49 The \fBSUNW_C_KeyToObject()\fR function creates a key object for the specified
50 mechanism from the \fIrawkey\fR data. The object should be destroyed with
51 \fBCK_DestroyObject()\fR when it is no longer required.
52.SH RETURN VALUES
55.LP
53 The \fBSUNW_C_GetMechSession()\fR function returns the following values:
54.sp
55.ne 2

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56 .na
57 \fB\fBCKR_OK\fR\fR
58 .ad
59 .RS 25n
60 The function completed successfully.
61 .RE

63 .sp
64 .ne 2
65 .na
66 \fB\fBCKR_SESSION_COUNT\fR\fR
67 .ad
68 .RS 25n
69 No sessions are available.
70 .RE

72 .sp
73 .ne 2
74 .na
75 \fB\fBCKR_ARGUMENTS_BAD\fR\fR
76 .ad
77 .RS 25n
78 A null pointer was passed for the return session handle.
79 .RE

81 .sp
82 .ne 2
83 .na
84 \fB\fBCKR_MECHANISM_INVALID\fR\fR
85 .ad
86 .RS 25n
87 The requested mechanism is invalid or no available plug-in provider supports
88 it.
89 .RE

91 .sp
92 .ne 2
93 .na
94 \fB\fBCKR_FUNCTION_FAILED\fR\fR
95 .ad
96 .RS 25n
97 The function failed.
98 .RE

100 .sp
101 .ne 2
102 .na
103 \fB\fBCKR_GENERAL_ERROR\fR\fR
104 .ad
105 .RS 25n
106 A general error occurred.
107 .RE

109 .sp
110.LP
111 The \fBSUNW_C_KeyToObject()\fR function returns the following values:
112.sp
113.ne 2
114.na
115 \fB\fBCKR_OK\fR\fR
116 .ad
117 .RS 25n
118 The function completed successfully.
119 .RE

121 .sp

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122 .ne 2
123 .na
124 \fB\FBCKR_ARGUMENTS_BAD\fR\fR
125 .ad
126 .RS 25n
127 A null pointer was passed for the session handle or the key material.
128 .RE

130 .sp
131 .ne 2
132 .na
133 \fB\FBCKR_MECHANISM_INVALID\fR\fR
134 .ad
135 .RS 25n
136 The requested mechanism is invalid or no available plug-in provider supports
137 it.
138 .RE

140 .sp
141 .ne 2
142 .na
143 \fB\FBCKR_FUNCTION_FAILED\fR\fR
144 .ad
145 .RS 25n
146 The function failed.
147 .RE

149 .sp
150 .ne 2
151 .na
152 \fB\FBCKR_GENERAL_ERROR\fR\fR
153 .ad
154 .RS 25n
155 A general error occurred.
156 .RE

158 .sp
159 .LP
160 The return values of each of the implemented functions are defined and listed
161 in the RSA PKCS#11 v2.20 specification. See http://www.rsasecurity.com.
162 .SH USAGE
163 .LP
163 These functions are not part of the RSA PKCS#11 v2.20 specification. They are
164 not likely to exist on non-Solaris systems. They are provided as a convenience
165 to application programmers. Use of these functions will make the application
166 non-portable to other systems.
167 .SH ATTRIBUTES
172 .LP
168 See \fBAttributes\fR(5) for descriptions of the following attributes:
169 .sp

171 .sp
172 .TS
173 box;
174 c | c
175 l | l .
176 ATTRIBUTE TYPE ATTRIBUTE VALUE
177 -
178 Interface Stability Evolving
179 -
180 MT-Level MT-Safe
181 .TE

183 .SH SEE ALSO
189 .LP
184 \fBlibpkcs11\fR(3LIB), \fBAttributes\fR(5)

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185 .sp
186 .LP
187 http://www.rsasecurity.com

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*****
8618 Tue Aug 27 13:52:39 2019
new/usr/src/man/man3lib/libpkcs11.3lib
11628 typos detected by mandoc style
*****
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8 .Dd Aug 27, 2019
9 .Dd Oct 19, 2016
10 .Dt LIBPKCS11 3LIB
11 .Os
12 .Sh NAME
13 .Nm libpkcs11
14 .Nd PKCS#11 Cryptographic Framework library
15 .Sh SYNOPSIS
16 .Lb libpkcs11
17 .In security/cryptoki.h
18 .In security/pkcs11.h
19 .Sh DESCRIPTION
20 The
21 library implements the RSA Security Inc. PKCS#11
22 Cryptographic Token Interface (Cryptoki), v2.40 specification by using plug-ins
23 to provide the slots.
24 .Lp
25 Each plug-in, which also implements RSA PKCS#11 v2.40, represents one or more
26 slots.
27 .Lp
28 The
29 .Nm
30 library provides a special slot called the meta slot.
31 The meta slot provides a virtual union of capabilities of all other slots.
32 When available, the meta slot is always the first slot provided by
33 .Nm .
34 .Lp
35 The meta slot feature can be configured either system-wide or by individual
36 users.
37 System-wide configuration for meta slot features is done with the
38 .Xr cryptoadm 1M
39 utility.
40 User configuration for meta slot features is performed with environment
41 variables.
42 .Lp
43 By default, the following is the system-wide configuration for meta slot.
44 Meta slot is enabled.
45 Meta slot provides token-based object support with the Software RSA PKCS#11
46 softtoken
47 .Pq Xr pkcs11_softtoken 5 .
48 Meta slot is
49 allowed to move sensitive token objects to other slots if that is necessary to
50 perform an operation.
51 .Lp
52 Users can overwrite one or more system-wide configuration options for meta slot
53 using these environment variables.
54 .Lp
55 The
56 .Ev ${METASLOT_OBJECTSTORE_SLOT}
57 and
58 .Ev ${METASLOT_OBJECTSTORE_TOKEN}
59 environment variables are used to specify an alternate token object store.
60 A user can specify either slot-description in

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61 .Ev ${METASLOT_OBJECTSTORE_SLOT}
62 or token-label in
63 .Ev ${METASLOT_OBJECTSTORE_TOKEN} ,
64 or both.
65 .Ev ${METASLOT_OBJECTSTORE_TOKEN} , or both.
66 Valid values for slot-description and token-label are available from output of
67 the command:
68 .Bd -literal -offset indent
69 # cryptoadm list -v
70 .Ed
71 .Lp
72 The
73 .Ev ${METASLOT_ENABLED}
74 environment variable is used to specify whether
75 the user wants to turn the metaslot feature on or off.
76 Only two values are recognized.
77 The value "true" means meta slot will be on.
78 The value "false" means meta slot will be off.
79 .Lp
80 The
81 .Ev ${METASLOT_AUTO_KEY_MIGRATE}
82 environment variable is used to specify
83 whether the user wants sensitive token objects to move to other slots for
84 cryptographic operations.
85 Only two values are recognized.
86 The value "true" means meta slot will migrate sensitive token objects to other
87 slots if necessary.
88 The value "false" means meta slot will not migrate sensitive token objects to
89 other slots even if it is necessary.
90 .Lp
91 When the meta slot feature is enabled, the slot that provides token-based
92 object support is not shown as one of the available slots.
93 All of its functionality can be used with the meta slot.
94 .Lp
95 This library filters the list of mechanisms available from plug-ins based on
96 the policy set by
97 .Xr cryptoadm 1M .
98 .Lp
99 This library provides entry points for all PKCS#11 v2.40 functions.
100 See the PKCS#11 v2.40 specifications at
101 .Lk http://www.oasis-open.org .
102 .Lk http://www.oasis-open.org .
103 .Lp
104 Plug-ins are added to
105 .Nm
106 by the
107 .Sy pkcs11conf
108 class action
109 script during execution of
110 .Xr pkgadd 1M .
111 The available mechanisms are administered by the
112 .Xr cryptoadm 1M
113 utility.
114 .Lp
115 Plug-ins must have all of their library dependencies specified, including
116 Plug-ins must have all of their library dependancies specified, including
117 .Xr libc 3LIB .
118 Libraries that have unresolved symbols, including those from
119 .Xr libc 3LIB ,
120 will be rejected and a message will be sent to
121 .Xr syslog 3C
122 for such plug-ins.
123 .Lp
124 Due to U.S. Export regulations, all plug-ins are required to be
125 cryptographically signed using the
126 .Xr elfsign 1

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124 utility.
125 .Lp
126 Any plug-in that is not signed or is not a compatible version of PKCS#11 will
127 be dropped by
128 .Nm .
129 When a plug-in is dropped, the administrator is alerted by the
130 .Xr syslog 3C
131 utility.
132 .Lp
133 The
134 .In security/pkcs11f.h
135 header contains function definitions.
136 The
137 .In security/pkcs11t.h
138 header contains type definitions.
139 Applications can include either of these headers in place of
140 .In security/pkcs11.h ,
141 which contains both function and type definitions.
142 .Sh INTERFACES
143 The shared object
144 .Pa libpkcs11.so.1
145 provides the public interfaces defined below.
146 See
147 .Xr Intro 3
148 for additional information on shared object interfaces.
149 .Ss "PKCS#11 Standard"
150 .\"
151 .\" Use SUNW_C_GetMechSession for the first column so both sections will
152 .\" line up better when rendered
153 .\"
154 .Bl -column -offset indent ".Sy SUNW_C_GetMechSession" ".Sy C_DecryptDigestUpdat
155 .It Sy C_CloseAllSessions Ta Sy C_CloseSession
156 .It Sy C_CopyObject Ta Sy C_CreateObject
157 .It Sy C_Decrypt Ta Sy C_DecryptDigestUpdate
158 .It Sy C_DecryptFinal Ta Sy C_DecryptInit
159 .It Sy C_DecryptUpdate Ta Sy C_DecryptVerifyUpdate
160 .It Sy C_DeriveKey Ta Sy C_DestroyObject
161 .It Sy C_Digest Ta Sy C_DigestEncryptUpdate
162 .It Sy C_DigestFinal Ta Sy C_DigestInit
163 .It Sy C_DigestKey Ta Sy C_DigestUpdate
164 .It Sy C_Encrypt Ta Sy C_EncryptFinal
165 .It Sy C_EncryptInit Ta Sy C_EncryptUpdate
166 .It Sy C_Finalize Ta Sy C_FindObjects
167 .It Sy C_FindObjectsFinal Ta Sy C_FindObjectsInit
168 .It Sy C_GenerateKey Ta Sy C_GenerateKeyPair
169 .It Sy C_GenerateRandom Ta Sy C_GetAttributeValue
170 .It Sy C_GetFunctionList Ta Sy C_GetInfo
171 .It Sy C_GetMechanismInfo Ta Sy C_GetMechanismList
172 .It Sy C_GetObjectSize Ta Sy C_GetOperationState
173 .It Sy C_GetSessionInfo Ta Sy C_GetSlotInfo
174 .It Sy C_GetSlotList Ta Sy C_GetTokenInfo
175 .It Sy C_InitPIN Ta Sy C_InitToken
176 .It Sy C_Initialize Ta Sy C_Login
177 .It Sy C_Logout Ta Sy C_OpenSession
178 .It Sy C_SeedRandom Ta Sy C_SetAttributeValue
179 .It Sy C_SetOperationState Ta Sy C_SetPIN
180 .It Sy C_Sign Ta Sy C_SignEncryptUpdate
181 .It Sy C_SignFinal Ta Sy C_SignInit
182 .It Sy C_SignRecover Ta Sy C_SignRecoverInit
183 .It Sy C_SignUpdate Ta Sy C_UnwrapKey
184 .It Sy C_Verify Ta Sy C_VerifyFinal
185 .It Sy C_VerifyInit Ta Sy C_VerifyRecover
186 .It Sy C_VerifyRecoverInit Ta Sy C_VerifyUpdate
187 .It Sy C_WaitForSlotEvent Ta Sy C_WrapKey
188 .El
189 .Ss "SUNW Extensions"

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190 .Bl -column -offset indent ".Sy SUNW_C_GetMechSession" ".Sy C_DecryptDigestUpdat
191 .It Sy SUNW_C_GetMechSession Ta Sy SUNW_C_KeyToObject
192 .El
193 .Sh FILES
194 .Bl -tag -compact -width Pa
195 .It Pa /usr/lib/libpkcs11.so.1
196 shared object
197 .It Pa /usr/lib/64/libpkcs11.so.1
198 64-bit shared object
199 .El
200 .Sh ATTRIBUTES
201 See
202 .Xr attributes 5
203 for descriptions of the following attributes:
204 .Sh INTERFACE STABILITY
205 .Sy Committed
206 .Sh MT-LEVEL
207 The SUNW Extension functions are MT-Safe.
208 The PKCS#11 Standard functions are MT-Safe with exceptions.
209 See Section 2.5.3 of PKCS#11 Cryptographic Token Usage Guide v2.40 and
210 Section 5.1.5 of PKCS#11 Cryptographic Token Interface Base Standard v2.40
209 .Sh STANDARD
210 The PKCS#11 Standard functions conform to PKCS#11 Cryptographic Token
211 Interface Profiles v2.40 Extended Provider.
211 .Sh SEE ALSO
212 .Xr cryptoadm 1M ,
213 .Xr pkgadd 1M ,
214 .Xr Intro 3 ,
215 .Xr syslog 3C ,
216 .Xr SUNW_C_GetMechSession 3EXT ,
217 .Xr attributes 5 ,
218 .Xr pkcs11_kernel 5 ,
219 .Xr pkcs11_softtoken 5
220 .Rs
221 .%T "PKCS#11 Cryptographic Token Interface Base Specification v2.40 Plus Errata
222 .%U http://docs.oasis-open.org/pkcs11/pkcs11-base/v2.40/errata01/os/pkcs11-base-
223 .Re
224 .Rs
225 .%T "PKCS#11 Cryptographic Token Interface Profiles v2.40"
226 .%U http://docs.oasis-open.org/pkcs11/pkcs11-profiles/v2.40/pkcs11-profiles-v2.4
227 .Re
228 .Rs
229 .%T "PKCS#11 Cryptographic Token Interface Usage Guide v2.40"
230 .%U http://docs.oasis-open.org/pkcs11/pkcs11-ug/v2.40/pkcs11-ug-v2.40.html
231 .Re
232 .Sh STANDARDS
233 The PKCS#11 Standard functions conform to PKCS#11 Cryptographic Token
234 Interface Profiles v2.40 Extended Provider.
235 .Sh NOTES
236 If an application calls
237 .Fn C_WaitForSlotEvent
238 without the
239 .Dv CKF_DONT_BLOCK
240 flag set,
241 .Nm
242 must create threads internally.
243 If, however,
244 .Dv CKF_LIBRARY_CANT_CREATE_OS_THREADS
245 is set,
246 .Fn C_WaitForSlotEvent
247 returns
248 .Dv CKR_FUNCTION_FAILED .
249 .Lp
249 The PKCS#11 library does not work with Netscape 4.\fI{x}\fR but does work with
249 more recent versions of Netscape and Mozilla.
250 .Lp

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250 Because
251 **.Fn C_Initialize**
252 *.Fn C_Initialize*
252 might have been called by both an application and a
253 library, it is not safe for a library or its plugins to call
254 *.Fn C_Finalize* .
255 A library can be finished calling functions from
256 *.Nm* ,
257 while an application might not.

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*****
1215 Tue Aug 27 13:52:39 2019
new/usr/src/man/man3proc/Pisprocdir.3proc
11628 typos detected by mandoc style
*****
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10 .\"
11 .\"
12 .\" Copyright 2015 Joyent, Inc.
13 .\"
14 .Dd Aug 27, 2019
14 .Dd May 11, 2016
15 .Dt PISPROCIDR 3PROC
16 .Os
17 .Sh NAME
18 .Nm Pisprocdir
19 .Nd determine if a directory is the /proc directory
20 .Sh LIBRARY
21 .Lb libproc
22 .Sh SYNOPSIS
23 .In libproc.h
24 .Ft int
25 .Fo Pisprocdir
26 .Fa "struct ps_prochandle *p"
27 .Fa "const char *dir"
28 .Fc
29 .Sh DESCRIPTION
29 .Sh DESECRPTION
30 The
31 .Fn Pisprocdir
32 function determines whether or not the directory
33 .Fa dir
34 is the root of the /proc file-system.
35 This works across loopback file system (lofs) mounts and chroots.
36 .Sh RETURN VALUES
37 Upon successful completion, the
38 .Fn Pisprocdir
39 function returns
40 .Sy 1
41 if
42 .Fa dir
43 is the /proc directory, otherwise if not, it returns
44 .Sy 0 .
45 .Sh INTERFACE STABILITY
46 .Sy Uncommitted
47 .Sh MT-LEVEL
48 See
49 .Sy LOCKING
50 in
51 .Xr libproc 3LIB .
52 .Sh SEE ALSO
53 .Xr libproc 3LIB ,
54 .Xr proc 4 ,
55 .Xr lofs 7FS
```