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8672 Mon May 26 17:42:22 2014
new/usr/src/man/man3secdb/getexecattr.3secdb
4835 getexecattr(3secdb): Minor formatting issues
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 6 .TH GETEXECATTR 3SECDB "Mar 31, 2005"
 7 .SH NAME
 8 getexecattr, free_execattr, setexecattr, endexecattr, getexecuser, getexecprof,
 9 match_execattr \- get execution profile entry
10 .SH SYNOPSIS
11 .LP
12 .nf
13 cc [\fIflag\fR...] \fIfile\fR... -lsecdb -lsocket -lnsl [\fIlibrary\fR...
14 #include <exec_attr.h>
15 #include <secdb.h>
17 \fBexecattr_t *\fR\fBgetexecattr\fR(\fBvoid\fR);
18 .fi
20 .LP
21 .nf
22 \fBvoid\fR \fBfree_execattr\fR(\fBexecattr_t *\fR\fIep\fR);
23 .fi
25 .LP
26 .nf
27 \fBvoid\fR \fBsetexecattr\fR(\fBvoid\fR);
28 .fi
30 .LP
31 .nf
32 \fBvoid\fR \fBendexecattr\fR(\fBvoid\fR);
33 .fi
35 .LP
36 .nf
37 \fBexecattr_t *\fR\fBgetexecuser\fR(\fBconst char *\fR\fIusername\fR, \fBconst c
38 \fBconst char *\fR\fIid\fR, \fBint\fR \fIsearch_flag\fR);
39 .fi
41 .LP
42 .nf
43 \fBexecattr_t *\fR\fBgetexecprof\fR(\fBconst char *\fR\fIprofilename\fR, \fBconst c
44 \fBconst char *\fR\fIid\fR, \fBint\fR \fIsearch_flag\fR);
45 .fi
47 .LP
48 .nf
49 \fBexecattr_t *\fR\fBmatch_execattr\fR(\fBexecattr_t *\fR\fIep\fR, \fBchar *\fR\
50 \fBchar *\fR\fItype\fR, \fBchar *\fR\fIid\fR);
51 .fi
53 .SH DESCRIPTION
54 .sp
55 .LP
56 The \fBgetexecattr()\fR function returns a single \fBexec_attr\fR(4) entry.
57 Entries can come from any of the sources specified in the
58 \fBnsswitch.conf\fR(4) file.
59 .sp
60 .LP
61 Successive calls to \fBgetexecattr()\fR return either successive

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62 \fBexec_attr\fR entries or \fINULL\fR. Because \fBgetexecattr()\fR always  

63 returns a single entry, the \fBnext\fR pointer in the \fBexecattr_t\fR data  

64 structure points to \fINULL\fR.  

65 .sp  

66 .LP  

67 The internal representation of an \fBexec_attr\fR entry is an \fBexecattr_t\fR  

68 structure defined in <\fBexec_attr.h\fR> with the following members:  

69 .sp  

70 .in +2  

71 .nf  

72 char               *name; /* name of the profile */  

73 char               *type; /* type of profile */  

74 char               *policy; /* policy under which the attributes are */  

75                    /* relevant */  

76 char               *res1; /* reserved for future use */  

77 char               *res2; /* reserved for future use */  

78 char               *id; /* unique identifier */  

79 kva_t             *attr; /* attributes */  

80 struct execattr_s *next; /* optional pointer to next profile */  

81 .fi  

82 .in -2  

84 .sp  

85 .LP  

86 The \fBfree_execattr()\fR function releases memory. It follows the \fBnext\fR  

87 pointers in the \fBexecattr_t\fR structure so that the entire linked list is  

88 released.  

89 .sp  

90 .LP  

91 The \fBsetexecattr()\fR function "rewinds" to the beginning of the enumeration  

92 of \fBexec_attr\fR entries. Calls to \fBgetexecuser()\fR can leave the  

93 enumeration in an indeterminate state. Therefore, \fBsetexecattr()\fR should be  

94 called before the first call to \fBgetexecattr()\fR.  

95 .sp  

96 .LP  

97 The \fBendexecattr()\fR function can be called to indicate that \fBexec_attr\fR  

98 processing is complete; the library can then close any open \fBexec_attr\fR  

99 file, deallocate any internal storage, and so forth.  

100 .sp  

101 .LP  

102 The \fBgetexecuser()\fR function returns a linked list of entries that match  

103 the \fItype\fR and \fIid\fR arguments and have a profile that has been assigned  

104 to the user specified by \fIusername\fR, as described in \fBpasswd\fR(4).  

105 Profiles for the user are obtained from the list of default profiles in  

106 \fB/etc/security/policy.conf\fR (see \fBpolicy.conf\fR(4)) and the  

107 \fBuser_attr\fR(4) database. Only entries in the name service scope for which  

108 the corresponding profile entry is found in the \fBprof_attr\fR(4) database are  

109 returned.  

110 .sp  

111 .LP  

112 The \fBgetexecprof()\fR function returns a linked list of entries that match  

113 the \fItype\fR and \fIid\fR arguments and have the profile specified by the  

114 \fIprofilename\fR argument. Only entries in the name service scope for which the  

115 corresponding profile entry is found in the \fBprof_attr\fR database are  

116 returned.  

117 .sp  

118 .LP  

119 Using \fBgetexecuser()\fR and \fBgetexecprof()\fR, programmers can search for  

120 any \fItype\fR argument, such as the manifest constant \fBKV_COMMAND\fR. The  

121 arguments are logically AND-ed together so that only entries exactly matching  

122 all of the arguments are returned. Wildcard matching applies if there is no  

123 exact match for an \fIBID\fR. Any argument can be assigned the \fINULL\fR value  

124 to indicate that it is not used as part of the matching criteria. The \fB\fR  

125 search_flag controls whether the function returns the first match  

126 (\fBGET_ONE\fR), setting the \fBnext\fR pointer to \fINULL\fR or all matching  

127 entries (\fBGET_ALL\fR), using the \fBnext\fR pointer to create a linked list
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128 of all entries that meet the search criteria. See \fbEXAMPLES\fR.
129 .sp
130 .LP
131 Once a list of entries is returned by \fBgetexecuser()\fR or
132 \fBgetexecprof()\fR, the convenience function \fBmatch_execattr()\fR can be
133 used to identify an individual entry. It returns a pointer to the individual
134 element with the same profile name (\fIprofile\fR), type name (\fItyp\fR),
135 element with the same profile name (\fIprofile\fR), type name (\fItyp\fR),
136 and \fIid\fR. Function parameters set to \fINULL\fR are not used as part of the
137 matching criteria. In the event that multiple entries meet the matching
138 criteria, only a pointer to the first entry is returned. The
139 \fBkva_match\fR(3SECDB) function can be used to look up a key in a key-value
140 array.
140 .SH RETURN VALUES
141 .sp
142 .LP
143 Those functions returning data only return data related to the active policy.
144 The \fBgetexecattr()\fR function returns a pointer to a \fBexecattr_t\fR if it
145 successfully enumerates an entry; otherwise it returns \fINULL\fR, indicating
146 the end of the enumeration.
147 .SH USAGE
148 .sp
149 .LP
150 The \fBgetexecattr()\fR, \fBgetexecuser()\fR, and \fBgetexecprof()\fR functions
151 all allocate memory for the pointers they return. This memory should be
152 deallocated with the \fBfree_execattr()\fR call. The \fBmatch_execattr()\fR
152 deallocated with the \fBfree_execattr()\fR call. The \fBmatch_execattr()\fR(
153 function does not allocate any memory. Therefore, pointers returned by this
154 function should not be deallocated.
155 .sp
156 .LP
157 Individual attributes may be referenced in the \fBattr\fR structure by calling
158 the \fBkva_match\fR(3SECDB) function.
159 .SH EXAMPLES
160 .LP
161 \fBExample 1\fR Find all profiles that have the \fBping\fR command.
162 .sp
163 .in +2
164 .nf
165 if ((execprof=getexecprof(NULL, KV_COMMAND, "/usr/sbin/ping",
166     GET_ONE)) == NULL) {
167     /* do error */
168 }


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unchanged portion omitted
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