
4877 Sun Jul 27 18:01:19 2014

new/usr/src/cmd/mandoc/lib.in

Update libraries and sections.

```

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 2014 Garrett D'Amore <garrett@damore.org>
14  * Copyright 2012 Nexenta Systems, Inc. All rights reserved.
15 */

16 /*
17  * Note that we don't document "legacy" libraries that have moved into
18  * libc. While there will be section 3lib man pages for them, they
19  * won't be referenced in other man pages.
20  * TBD
21 */

21 LINE("libadm", "General Administrative Library (libadm, \\\-ladm)")
22 LINE("libbsdmalloc", "BSD Memory Allocation Library (libbsdmalloc, \\\-bsdmallo")
23 LINE("libbsm", "Security and Auditing Library (libbsm, \\\-bsm)")
24 LINE("libc", "Standard C Library (libc, \\\-lc)")
25 LINE("libc_db", "Threads Debugging Library (libc_db, \\\-lc_db)")
26 LINE("libcfgadm", "Configuration Administration Library (libcfgadm, \\\-lcfg")
27 LINE("libcommutil", "Communication Protocol Parser Utilities Library (libpcp")
28 LINE("libcontract", "Contract Management Library (libcontract, \\\-lcontract")
29 LINE("libcpic", "CPU Performance Counters Library (libcpic, \\\-lcpic)")
30 LINE("libcurses", "Curses Library (libcurses, \\\-lcurses)")
31 LINE("libdat", "Direct Access Transport Library (libdat, \\\-ldat)")
32 LINE("libdevinfo", "Device ID Library (libdevinfo, \\\-ldevinfo)")
33 LINE("libdevinfo", "Device Information Library (libdevinfo, \\\-ldevinfo)")
34 LINE("libdlpi", "Data Link Provider Interface (DLPI) Library (libdlpi, \\\-")
35 LINE("libdns_sd", "DNS Service Discovery Library (libdns_sd, \\\-ldns_sd)")
36 LINE("libelf", "ELF Access Library (libelf, \\\-lelf)")
37 LINE("libexacct", "Extended Accounting File Access Library (libexacct, \\\-")
38 LINE("libfcoe", "FCoE Port Management Library (libfcoe, \\\-lfcoe)")
39 LINE("libfstyp", "File System Type Identification Library (libfstyp, \\\-l")
40 LINE("libgen", "String Pattern Matching Library (libgen, \\\-lgen)")
41 LINE("libgss", "Generic Security Services Library (libgss, \\\-lgss)")
42 LINE("libiscsit", "iSCSI Management Library (libiscsit, \\\-liscsit)")
43 LINE("libkstat", "Kernel Statistics Library (libkstat, \\\-lkstat)")
44 LINE("libkvm", "Kernel VM Library (libkvm, \\\-lkvm)")
45 LINE("libldap", "LDAP Library (libldap, \\\-lldap)")
46 LINE("liblgrp", "Locality Group Library (liblgrp, \\\-llgrp)")
47 LINE("libm", "Mathematical Library (libm, \\\-lm)")
48 LINE("libmail", "User Mailbox Library (libmail, \\\-lmail)")
49 LINE("libmalloc", "Memory Allocation Library (libmalloc, \\\-lmalloc)")
50 LINE("libmd", "Message Digest Library (libmd, \\\-lmd)")
51 LINE("libmp", "Multiple Precision Library (libmp, \\\-lmp)")
52 LINE("libmpapi", "Common Multipath Management Library (libmpapi, \\\-lmpapi)")
53 LINE("libnsl", "Network Services Library (libnsl, \\\-lnsl)")
54 LINE("libnvpair", "Name-Value Pair Library (libnvpair, \\\-lnvpair)")
55 LINE("libpam", "PAM (Pluggable Authentication Module) Library (libpam, \\\-")
56 LINE("libpicl", "PICL Library (libpicl, \\\-lpicl)")
57 LINE("libpicltree", "PICL Plug-In Library (libpicltree, \\\-lpicltree)")
58 LINE("libpkcs11", "PKCS#11 Cryptographic Framework Library (libpkcs11, \\\-")
59 LINE("libpool", "Pool Configuration Manipulation Library (libpool, \\\-lp")

```

```

60 LINE("libproc", "Process Control Library (libproc, \\\-lproc)")
61 LINE("libproject", "Project Database Access Library (libproject, \\\-lprojec")
62 LINE("libresolv", "Resolver Library (libresolv, \\\-lresolv \\\-lsocket \\\-l")
63 LINE("librpc", "RPC Service Library (librpcsvc, \\\-lrpc)")
64 LINE("librsm", "Remote Shared Memory Interface Library (librsm, \\\-lrsm")
65 LINE("libsasl", "Simple Authentication and Security Library (libsasl, \\\-")
66 LINE("libscf", "Service Configuration Facility Library (libscf, \\\-lscf")
67 LINE("libsec", "File Access Control Library (libsec, \\\-lsec)")
68 LINE("libsecdb", "Security Attributes Database Library (libsecdb, \\\-lsec")
69 LINE("libsip", "Session Initiation Protocol Library (libsip, \\\-lsip)")
70 LINE("libslp", "Service Location Protocol Library (libslp, \\\-lslp)")
71 LINE("libsocket", "Sockets Library (libsocket, \\\-lsocket)")
72 LINE("libstmf", "SCSI Target Mode Framework Library (libstmf, \\\-lstmf)")
73 LINE("libsyssevt", "System Event Interface Library (libsyssevt, \\\-lsysevt")
74 LINE("libtecla", "Interactive Command Line Input Library (libtecla, \\\-lt")
75 LINE("libtntctl", "TNF Probe Control Library (libtntctl, \\\-ltntctl)")
76 LINE("libtsol", "Trusted Extensions Library (libtsol, \\\-ltsol)")
77 LINE("libuuid", "UUID Library (libuuid, \\\-luuid)")
78 LINE("libvolmgt", "Volume Management Library (libvolmgt, \\\-lvolmgt)")
79 LINE("libxcurses", "X/Open Curses Library (libxcurses, \\\-lxcurses)")
80 LINE("libxnet", "X/Open Networking Library (libxnet, \\\-lxnet)")

```

new/usr/src/cmd/mandoc/mdoc.h

1

8525 Sun Jul 27 18:01:19 2014

new/usr/src/cmd/mandoc/mdoc.h

Various tweaks -- add our sections, etc.

_____unchanged_portion_omitted_____

```
189 /*
190  * Section (named/unnamed) of 'Sh'. Note that these appear in the
191  * conventional order imposed by mdoc.7. In the case of SEC_NONE, no
192  * section has been invoked (this shouldn't happen). SEC_CUSTOM refers
193  * to other sections.
194  */
```

```
195 enum      mdoc_sec {
196     SEC_NONE = 0,
197     SEC_NAME, /* NAME */
198     SEC_LIBRARY, /* LIBRARY */
199     SEC_SYNOPSIS, /* SYNOPSIS */
200     SEC_DESCRIPTION, /* DESCRIPTION */
201     SEC_IMPLEMENTATION, /* IMPLEMENTATION NOTES */
202     SEC_RETURN_VALUES, /* RETURN VALUES */
203     SEC_ENVIRONMENT, /* ENVIRONMENT */
204     SEC_FILES, /* FILES */
205     SEC_EXIT_STATUS, /* EXIT STATUS */
206     SEC_EXAMPLES, /* EXAMPLES */
207     SEC_DIAGNOSTICS, /* DIAGNOSTICS */
208     SEC_COMPATIBILITY, /* COMPATIBILITY */
209     SEC_ERRORS, /* ERRORS */
210     SEC_ARCHITECTURE,
211     SEC_CODE_SET_INDEPENDENCE,
212     SEC_INTERFACE_STABILITY,
213     SEC_MULTITHREADING_LEVEL,
214     SEC_SEE_ALSO, /* SEE ALSO */
215     SEC_STANDARDS, /* STANDARDS */
216     SEC_HISTORY, /* HISTORY */
217     SEC_AUTHORS, /* AUTHORS */
218     SEC_CAVEATS, /* CAVEATS */
219     SEC_BUGS, /* BUGS */
220     SEC_SECURITY, /* SECURITY */
221     SEC_CUSTOM,
222     SEC_MAX
223 };
```

_____unchanged_portion_omitted_____

new/usr/src/cmd/mandoc/mdoc_validate.c

1

52026 Sun Jul 27 18:01:19 2014

new/usr/src/cmd/mandoc/mdoc_validate.c

Various tweaks -- add our sections, etc.

_____unchanged_portion_omitted_____

```
325 static const char * const secnames[SEC__MAX] = {
326     NULL,
327     "NAME",
328     "LIBRARY",
329     "SYNOPSIS",
330     "DESCRIPTION",
331     "IMPLEMENTATION NOTES",
332     "RETURN VALUES",
333     "ENVIRONMENT",
334     "FILES",
335     "EXIT STATUS",
336     "EXAMPLES",
337     "DIAGNOSTICS",
338     "COMPATIBILITY",
339     "ERRORS",
340     "ARCHITECTURE",
341     "CODE SET INDEPENDENCE",
342     "INTERFACE STABILITY",
343     "MULTITHREADING LEVEL",
344     "SEE ALSO",
345     "STANDARDS",
346     "HISTORY",
347     "AUTHORS",
348     "CAVEATS",
349     "BUGS",
350     "SECURITY CONSIDERATIONS",
351     NULL
352 };
```

_____unchanged_portion_omitted_____

5106 Sun Jul 27 18:01:19 2014

new/usr/src/cmd/mandoc/msec.in

Update libraries and sections.

```

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 2012 Nexenta Systems, Inc. All rights reserved.
14  */

16 LINE("1", "User Commands")
17 LINE("1B", "BSD Compatibility Package Commands")
18 LINE("1b", "illumos/BSD Compatibility Package Commands")
19 LINE("1c", "illumos/BSD Compatibility Package Commands")
20 LINE("1C", "Communication Commands")
21 LINE("1c", "Communication Commands")
22 LINE("1F", "FMI Commands")
23 LINE("1f", "FMI Commands")
24 LINE("1G", "Graphics and CAD Commands")
25 LINE("1g", "Graphics and CAD Commands")
26 LINE("1HAS", "User Commands")
27 LINE("1has", "User Commands")
28 LINE("1M", "Maintenance Commands")
29 LINE("1m", "Maintenance Commands")
30 LINE("1S", "illumos Specific Commands")
31 LINE("1s", "illumos Specific Commands")
32 LINE("2", "System Calls")
33 LINE("3", "Introduction to Library Functions")
34 LINE("3BSDMALLOC", "BSD Memory Allocation Library")
35 LINE("3BAIO", "Asynchronous I/O Library Functions")
36 LINE("3baio", "Asynchronous I/O Library Functions")
37 LINE("3BSM", "Security and Auditing Library Functions")
38 LINE("3bsm", "Security and Auditing Library Functions")
39 LINE("3C", "Standard C Library Functions")
40 LINE("3C++", "C++ Library Functions")
41 LINE("3c", "Standard C Library Functions")
42 LINE("3C_DB", "Threads Debugging Library Functions")
43 LINE("3C_db", "Threads Debugging Library Functions")
44 LINE("3CFGADM", "Configuration Administration Library Functions")
45 LINE("3COMMPUTIL", "Communication Protocol Parser Utilities Library Functions")
46 LINE("3cfgadm", "Configuration Administration Library Functions")
47 LINE("3COMPPUTIL", "Communication Protocol Parser Utilities Library Functions")
48 LINE("3compputil", "Communication Protocol Parser Utilities Library Functions")
49 LINE("3CONTRACT", "Contract Management Library Functions")
50 LINE("3contract", "Contract Management Library Functions")
51 LINE("3CPC", "CPU Performance Counters Library Functions")
52 LINE("3cpc", "CPU Performance Counters Library Functions")
53 LINE("3CURSES", "Curses Library Functions")
54 LINE("3curses", "Curses Library Functions")
55 LINE("3DAT", "Direct Access Transport Library Functions")
56 LINE("3dat", "Direct Access Transport Library Functions")
57 LINE("3DEVID", "Device ID Library Functions")
58 LINE("3devic", "Device ID Library Functions")
59 LINE("3DEVINFO", "Device Information Library Functions")
60 LINE("3devinfo", "Device Information Library Functions")
61 LINE("3DL", "Dynamic Linking Library Functions")

```

```

58 LINE("3dl", "Dynamic Linking Library Functions")
59 LINE("3DLPI", "Data Link Provider Interface Library Functions")
60 LINE("3dlpi", "Data Link Provider Interface Library Functions")
61 LINE("3DMI", "DMI Library Functions")
62 LINE("3dmi", "DMI Library Functions")
63 LINE("3DNS_SD", "DNS Service Discovery Library Functions")
64 LINE("3dns_sd", "DNS Service Discovery Library Functions")
65 LINE("3DOOR", "Door Library Functions")
66 LINE("3door", "Door Library Functions")
67 LINE("3ELF", "ELF Library Functions")
68 LINE("3elf", "ELF Library Functions")
69 LINE("3EXACCT", "Extended Accounting File Access Library Functions")
70 LINE("3exacct", "Extended Accounting File Access Library Functions")
71 LINE("3EXT", "Extended Library Functions")
72 LINE("3ext", "Extended Library Functions")
73 LINE("3FCOE", "FCoE Port Management Library Functions")
74 LINE("3fcoe", "FCoE Port Management Library Functions")
75 LINE("3FSTYP", "File System Type Identification Library Functions")
76 LINE("3fstyp", "File System Type Identification Library Functions")
77 LINE("3GEN", "String Pattern-Matching Library Functions")
78 LINE("3gen", "String Pattern-Matching Library Functions")
79 LINE("3GSS", "Generic Security Services API Library Functions")
80 LINE("3gss", "Generic Security Services API Library Functions")
81 LINE("3HEAD", "Headers")
82 LINE("3head", "Headers")
83 LINE("3ISCSIT", "iSCSI Management Library Functions")
84 LINE("3iscsit", "iSCSI Management Library Functions")
85 LINE("3KRB", "Kerberos Library Functions")
86 LINE("3KRB5", "MIT Kerberos 5 Library Functions")
87 LINE("3krb", "Kerberos Library Functions")
88 LINE("3KSTAT", "Kernel Statistics Library Functions")
89 LINE("3kstat", "Kernel Statistics Library Functions")
90 LINE("3KVM", "Kernel VM Library Functions")
91 LINE("3kvm", "Kernel VM Library Functions")
92 LINE("3LDAP", "LDAP Library Functions")
93 LINE("3ldap", "LDAP Library Functions")
94 LINE("3LGRP", "Locality Group Library Functions")
95 LINE("3lgrp", "Locality Group Library Functions")
96 LINE("3LIB", "Interface Libraries")
97 LINE("3lib", "Interface Libraries")
98 LINE("3LIBUCB", "illumos/BSD Compatibility Interface Libraries")
99 LINE("3libucb", "illumos/BSD Compatibility Interface Libraries")
100 LINE("3M", "Mathematical Library Functions")
101 LINE("3m", "Mathematical Library Functions")
102 LINE("3MAIL", "User Mailbox Library Functions")
103 LINE("3mail", "User Mailbox Library Functions")
104 LINE("3MALLOC", "Memory Allocation Library Functions")
105 LINE("3malloc", "Memory Allocation Library Functions")
106 LINE("3MP", "Multiple Precision Library Functions")
107 LINE("3mp", "Multiple Precision Library Functions")
108 LINE("3MPAPI", "Common Multipath Management Library Functions")
109 LINE("3mpapi", "Common Multipath Management Library Functions")
110 LINE("3NSL", "Networking Services Library Functions")
111 LINE("3nsl", "Networking Services Library Functions")
112 LINE("3NVPAR", "Name-value Pair Library Functions")
113 LINE("3nvpair", "Name-value Pair Library Functions")
114 LINE("3PAM", "PAM Library Functions")
115 LINE("3pam", "PAM Library Functions")
116 LINE("3PAPI", "PAPI Library Functions")
117 LINE("3papi", "PAPI Library Functions")
118 LINE("3PERL", "Perl Library Functions")
119 LINE("3perl", "Perl Library Functions")
120 LINE("3PICL", "PICL Library Functions")
121 LINE("3picl", "PICL Library Functions")
122 LINE("3PICLTREE", "PICL Plug-In Library Functions")
123 LINE("3picltree", "PICL Plug-In Library Functions")

```

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123 LINE("3PLOT", "Graphics Interface Library Functions")
124 LINE("3plot", "Graphics Interface Library Functions")
68 LINE("3POOL", "Pool Configuration Manipulation Library Functions")
126 LINE("3pool", "Pool Configuration Manipulation Library Functions")
69 LINE("3PROC", "Process Control Library Functions")
128 LINE("3proc", "Process Control Library Functions")
70 LINE("3PROJECT", "Project Database Access Library Functions")
130 LINE("3project", "Project Database Access Library Functions")
71 LINE("3RAC", "Remote Asynchronous Calls Library Functions")
132 LINE("3rac", "Remote Asynchronous Calls Library Functions")
72 LINE("3RESOLV", "Resolver Library Functions")
134 LINE("3resolv", "Resolver Library Functions")
73 LINE("3RPC", "RPC Library Functions")
136 LINE("3rpc", "RPC Library Functions")
74 LINE("3RSM", "Remote Shared Memory Library Functions")
138 LINE("3rsm", "Remote Shared Memory Library Functions")
75 LINE("3RT", "Realtime Library Functions")
140 LINE("3rt", "Realtime Library Functions")
76 LINE("3SASL", "Simple Authentication Security Layer Library Functions")
142 LINE("3sas1", "Simple Authentication Security Layer Library Functions")
77 LINE("3SCF", "Service Configuration Facility Library Functions")
144 LINE("3scf", "Service Configuration Facility Library Functions")
145 LINE("3SCHED", "LWP Scheduling Library Functions")
146 LINE("3sched", "LWP Scheduling Library Functions")
78 LINE("3SEC", "File Access Control Library Functions")
148 LINE("3sec", "File Access Control Library Functions")
79 LINE("3SECDB", "Security Attributes Database Library Functions")
150 LINE("3secdb", "Security Attributes Database Library Functions")
80 LINE("3SIP", "Session Initiation Protocol Library Functions")
152 LINE("3sip", "Session Initiation Protocol Library Functions")
81 LINE("3SLP", "Service Location Protocol Library Functions")
154 LINE("3slp", "Service Location Protocol Library Functions")
155 LINE("3SNMP", "SNMP Library Functions")
156 LINE("3snmp", "SNMP Library Functions")
82 LINE("3SOCKET", "Sockets Library Functions")
158 LINE("3socket", "Sockets Library Functions")
83 LINE("3STMF", "SCSI Target Mode Framework Library Functions")
160 LINE("3stmf", "SCSI Target Mode Framework Library Functions")
84 LINE("3SYSEVENT", "System Event Library Functions")
162 LINE("3sysevent", "System Event Library Functions")
85 LINE("3TECLA", "Interactive Command-line Input Library Functions")
164 LINE("3tecla", "Interactive Command-line Input Library Functions")
165 LINE("3THR", "Threads Library Functions")
166 LINE("3thr", "Threads Library Functions")
86 LINE("3TNF", "TNF Library Functions")
168 LINE("3tnf", "TNF Library Functions")
87 LINE("3TSOL", "Trusted Extensions Library Functions")
170 LINE("3tsol", "Trusted Extensions Library Functions")
171 LINE("3UCB", "illumos/BSD Compatibility Library Functions")
172 LINE("3ucb", "illumos/BSD Compatibility Library Functions")
88 LINE("3UUID", "Universally Unique Identifier Library Functions")
174 LINE("3uuid", "Universally Unique Identifier Library Functions")
89 LINE("3VOLMGT", "Volume Management Library Functions")
176 LINE("3volmgt", "Volume Management Library Functions")
90 LINE("3XCURSES", "X/Open Curses Library Functions")
178 LINE("3xcurses", "X/Open Curses Library Functions")
179 LINE("3XFN", "XFN Interface Library Functions")
180 LINE("3xfn", "XFN Interface Library Functions")
91 LINE("3XNET", "X/Open Networking Services Library Functions")
182 LINE("3xnet", "X/Open Networking Services Library Functions")
183 LINE("3B", "illumos/BSD Compatibility Library Functions")
184 LINE("3b", "illumos/BSD Compatibility Library Functions")
185 LINE("3C", "C Library Functions")
186 LINE("3c", "C Library Functions")
92 LINE("3F", "Fortran Library Routines")
188 LINE("3f", "Fortran Library Routines")

```

```

189 LINE("3G", "C Library Functions")
190 LINE("3g", "C Library Functions")
191 LINE("3K", "Kernel VM Library Functions")
192 LINE("3k", "Kernel VM Library Functions")
193 LINE("3L", "Lightweight Processes Library")
194 LINE("3l", "Lightweight Processes Library")
195 LINE("3N", "Network Functions")
196 LINE("3n", "Network Functions")
197 LINE("3R", "Realtime Library")
198 LINE("3r", "Realtime Library")
199 LINE("3S", "Standard I/O Functions")
200 LINE("3s", "Standard I/O Functions")
201 LINE("3T", "Threads Library")
202 LINE("3t", "Threads Library")
203 LINE("3W", "C Library Functions")
204 LINE("3w", "C Library Functions")
93 LINE("3X", "Miscellaneous Library Functions")
206 LINE("3x", "Miscellaneous Library Functions")
207 LINE("3XC", "X/Open Curses Library Functions")
208 LINE("3xc", "X/Open Curses Library Functions")
209 LINE("3XN", "X/Open Networking Services Library Functions")
210 LINE("3xn", "X/Open Networking Services Library Functions")
94 LINE("4", "File Formats")
212 LINE("4B", "illumos/BSD Compatibility Package File Formats")
213 LINE("4b", "illumos/BSD Compatibility Package File Formats")
95 LINE("5", "Standards, Environments, and Macros")
96 LINE("6", "Games and Demos")
97 LINE("7", "Device and Network Interfaces")
217 LINE("7B", "illumos/BSD Compatibility Special Files")
218 LINE("7b", "illumos/BSD Compatibility Special Files")
98 LINE("7D", "Devices")
220 LINE("7d", "Devices")
99 LINE("7FS", "File Systems")
222 LINE("7fs", "File Systems")
100 LINE("7I", "Ioctl Requests")
224 LINE("7i", "Ioctl Requests")
101 LINE("7IPP", "IP Quality of Service Modules")
226 LINE("7ipp", "IP Quality of Service Modules")
102 LINE("7M", "STREAMS Modules")
228 LINE("7m", "STREAMS Modules")
103 LINE("7P", "Protocols")
230 LINE("7p", "Protocols")
104 LINE("8", "Maintenance Procedures")
232 LINE("8C", "Maintenance Procedures")
233 LINE("8c", "Maintenance Procedures")
234 LINE("8S", "Maintenance Procedures")
235 LINE("8s", "Maintenance Procedures")
105 LINE("9", "Device Driver Interfaces")
106 LINE("9E", "Driver Entry Points")
238 LINE("9e", "Driver Entry Points")
107 LINE("9F", "Kernel Functions for Drivers")
240 LINE("9f", "Kernel Functions for Drivers")
108 LINE("9P", "Kernel Properties for Drivers")
242 LINE("9p", "Kernel Properties for Drivers")
109 LINE("9S", "Data Structures for Drivers")
244 LINE("9s", "Data Structures for Drivers")

```

new/usr/src/head/dirent.h

7169 Sun Jul 27 18:01:19 2014

new/usr/src/head/dirent.h

opendir, dirfd are in XPG7

alphasort and scandir are new in XPG7

```
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 2007 Sun Microsystems, Inc. All rights reserved.
24 * Use is subject to license terms.
25 */
26
27 /*
28 * Copyright 2014 Garrett D'Amore <garrett@damore.org>
29 */
30
31 /* Copyright (c) 1988 AT&T */
32 /* All Rights Reserved */
33
34 #ifndef _DIRENT_H
35 #define _DIRENT_H
36
37 #pragma ident "%Z%M% %I% %E% SMI" /* SVr4.0 1.6.1.5 */
38
39 #include <sys/feature_tests.h>
40
41 #include <sys/types.h>
42 #include <sys/dirent.h>
43
44 #ifndef __cplusplus
45 extern "C" {
46
47 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX)
48
49 #define MAXNAMLEN 512 /* maximum filename length */
50 #define DIRBUF 8192 /* buffer size for fs-indep. dirs */
51
52 #endif /* defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) */
53
54 #if !defined(__XOPEN_OR_POSIX)
55
56 typedef struct {
57     int dd_fd; /* file descriptor */
58     int dd_loc; /* offset in block */
59     int dd_size; /* amount of valid data */
60 }
```

1

new/usr/src/head/dirent.h

```
59 char *dd_buf; /* directory block */
60 } DIR; /* stream data from opendir() */
61
62 #ifndef __XOPEN_OR_POSIX
63
64 #endif
65
66 #if defined(__STDC__)
67
68 /* large file compilation environment setup */
69 #if !defined(_LP64) && _FILE_OFFSET_BITS == 64
70 #ifdef __PRAGMA_REDEFINE_EXTNAME
71 #pragma redefine_extname readdir readdir64
72 #pragma redefine_extname scandir scandir64
73 #pragma redefine_extname alphasort alphasort64
74 #else
75 #define readdir readdir64
76 #define scandir scandir64
77 #define alphasort alphasort64
78 #endif
79 #endif /* _FILE_OFFSET_BITS == 64 */
80
81 /* In the LP64 compilation environment, all APIs are already large file */
82 #if defined(_LP64) && defined(_LARGEFILE64_SOURCE)
83 #ifdef __PRAGMA_REDEFINE_EXTNAME
84 #pragma redefine_extname readdir readdir64
85 #pragma redefine_extname scandir scandir64
86 #pragma redefine_extname alphasort alphasort64
87 #else
88 #define readdir readdir64
89 #define scandir scandir64
90 #define alphasort alphasort64
91 #endif
92 #endif /* _LP64 && _LARGEFILE64_SOURCE */
93
94 extern DIR *opendir(const char *);
95 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) || defined(_XPG7) || \
96 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) || \
97     defined(_ATFILE_SOURCE)
98 extern DIR *fdopendir(int);
99 extern int dirfd(DIR *);
100 #endif /* defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) ... */
101
102 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) || defined(_XPG7)
103 extern int scandir(const char *, struct dirent **);
104 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX)
105 extern int scandir(const char *, struct dirent *([)],
106     int (*)(const struct dirent *),
107     int (*)(const struct dirent **),
108     const struct dirent **);
109 extern int alphasort(const struct dirent **,
110     const struct dirent **);
111 #endif /* defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) ... */
112
113 #endif /* defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) */
114
115 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX)
116 extern struct dirent *readdir(DIR *);
117 #if defined(__EXTENSIONS__) || !defined(_POSIX_C_SOURCE) || \
118     defined(_XOPEN_SOURCE)
119 extern long telldir(DIR *);
120 extern void seekdir(DIR *, long);
121 #endif /* defined(__EXTENSIONS__) || !defined(_POSIX_C_SOURCE) ... */
122 extern void rewinddir(DIR *);
123 extern int closedir(DIR *);
124
125 /* transitional large file interface */
126 #if defined(_LARGEFILE64_SOURCE) && !((_FILE_OFFSET_BITS == 64) && \
127     !defined(__PRAGMA_REDEFINE_EXTNAME))
```

2

```

128 extern struct dirent64 *readdir64(DIR *);
129 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX)
130 extern int scandir64(const char *, struct dirent64 **[,
131     extern int scandir64(const char *, struct dirent64 **[,
132     int (*)(const struct dirent64 *),
133     int (*)(const struct dirent64 **,
134     const struct dirent64 **));
135 extern int alphasort64(const struct dirent64 **, const struct dirent64 **);
136 #endif

136 #else

138 extern DIR *opendir();
139 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) || \
140     defined(_ATFILE_SOURCE)
141 extern DIR *fdopendir();
142 extern int dirfd();
143 #endif /* defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) ... */
144 extern struct dirent *readdir();
145 #if defined(__EXTENSIONS__) || !defined(_POSIX_C_SOURCE) || \
146     defined(_XOPEN_SOURCE)
147 extern long telldir();
148 extern void seekdir();
149 #endif /* defined(__EXTENSIONS__) || !defined(_POSIX_C_SOURCE) ... */
150 extern void rewinddir();
151 extern int closedir();

153 /* transitional large file interface */
154 #if defined(_LARGEFILE64_SOURCE) && !((_FILE_OFFSET_BITS == 64) && \
155     !defined(__PRAGMA_REDEFINE_EXTNAME))
156 extern struct dirent64 *readdir64();
157 #endif

159 #endif

161 #if defined(__EXTENSIONS__) || !defined(_POSIX_C_SOURCE) || \
162     defined(_XOPEN_SOURCE)
163 #define rewinddir(dirp) seekdir(dirp, 0L)
164 #endif

163 /*
164  * readdir_r() prototype is defined here.
165  *
166  * There are several variations, depending on whether compatibility with old
167  * POSIX draft specifications or the final specification is desired and on
168  * whether the large file compilation environment is active. To combat a
169  * combinatorial explosion, enabling large files implies using the final
170  * specification (since the definition of the large file environment
171  * considerably postdates that of the final readdir_r specification).
172  *
173  * In the LP64 compilation environment, all APIs are already large file,
174  * and since there are no 64-bit applications that can have seen the
175  * draft implementation, again, we use the final POSIX specification.
176  */

178 #if defined(__EXTENSIONS__) || defined(_REENTRANT) || \
179     !defined(__XOPEN_OR_POSIX) || (_POSIX_C_SOURCE - 0 >= 199506L) || \
180     defined(_POSIX_PTHREAD_SEMANTICS)

185 #if defined(__STDC__)

186 #if !defined(_LP64) && _FILE_OFFSET_BITS == 32

187 #if (_POSIX_C_SOURCE - 0 >= 199506L) || defined(_POSIX_PTHREAD_SEMANTICS)

```

```

166 #ifndef __PRAGMA_REDEFINE_EXTNAME
167 #pragma redefine_extname readdir_r __posix_readdir_r
168 extern int readdir_r(DIR *RESTRICT_KYWD, struct dirent *_RESTRICT_KYWD,
169     struct dirent **_RESTRICT_KYWD);
170 #else /* __PRAGMA_REDEFINE_EXTNAME */

172 extern int __posix_readdir_r(DIR *_RESTRICT_KYWD,
173     struct dirent *_RESTRICT_KYWD, struct dirent **_RESTRICT_KYWD);

175 #ifndef __lint
176 #define readdir_r __posix_readdir_r
177 #else /* !__lint */

179 static int
180 readdir_r(DIR *_RESTRICT_KYWD __dp, struct dirent *_RESTRICT_KYWD __ent,
181     struct dirent **_RESTRICT_KYWD __res) {
182     return (__posix_readdir_r(__dp, __ent, __res));
183 }

185 #endif /* !__lint */
186 #endif /* __PRAGMA_REDEFINE_EXTNAME */

188 #else /* (_POSIX_C_SOURCE - 0 >= 199506L) || ... */

190 extern struct dirent *readdir_r(DIR *__dp, struct dirent *__ent);

192 #endif /* (_POSIX_C_SOURCE - 0 >= 199506L) || ... */

194 #else /* !_LP64 && _FILE_OFFSET_BITS == 32 */

196 #if defined(_LP64)
197 #ifndef __PRAGMA_REDEFINE_EXTNAME
198 #pragma redefine_extname readdir64_r readdir_r
199 #else
200 #define readdir64_r readdir_r
201 #endif
202 #else /* _LP64 */
203 #ifndef __PRAGMA_REDEFINE_EXTNAME
204 #pragma redefine_extname readdir_r readdir64_r
205 #else
206 #define readdir_r readdir64_r
207 #endif
208 #endif /* _LP64 */
209 extern int readdir_r(DIR *_RESTRICT_KYWD, struct dirent *_RESTRICT_KYWD,
210     struct dirent **_RESTRICT_KYWD);

212 #endif /* !_LP64 && _FILE_OFFSET_BITS == 32 */

214 #if defined(_LARGEFILE64_SOURCE) && !((_FILE_OFFSET_BITS == 64) && \
215     !defined(__PRAGMA_REDEFINE_EXTNAME))
216 /* transitional large file interface */
217 extern int readdir64_r(DIR *_RESTRICT_KYWD, struct dirent64 *_RESTRICT_KYWD,
218     struct dirent64 **_RESTRICT_KYWD);
219 #endif

246 #else /* __STDC__ */

248 #if !defined(_LP64) && _FILE_OFFSET_BITS == 32

250 #if (_POSIX_C_SOURCE - 0 >= 199506L) || defined(_POSIX_PTHREAD_SEMANTICS)

252 #ifndef __PRAGMA_REDEFINE_EXTNAME
253 #pragma redefine_extname readdir_r __posix_readdir_r
254 extern int readdir_r();
255 #else /* __PRAGMA_REDEFINE_EXTNAME */

```

```

257 extern int __posix_readdir_r();

259 #ifdef __lint
260 #define readdir_r __posix_readdir_r
261 #else /* !__lint */

263 static int
264 readdir_r(DIR *_RESTRICT_KYWD __dp, struct dirent *_RESTRICT_KYWD __ent,
265          struct dirent **_RESTRICT_KYWD __res)
266 {
267     return (__posix_readdir_r(__dp, __ent, __res));
268 }

270 #endif /* !__lint */
271 #endif /* __PRAGMA_REDEFINE_EXTNAME */

273 #else /* (_POSIX_C_SOURCE - 0 >= 199506L) || ... */

275 extern struct dirent *readdir_r();

277 #endif /* (_POSIX_C_SOURCE - 0 >= 199506L) || ... */

279 #else /* !_LP64 && _FILE_OFFSET_BITS == 32 */

281 #if defined(_LP64)
282 #ifdef __PRAGMA_REDEFINE_EXTNAME
283 #pragma redefine_extname readdir64_r readdir_r
284 #else
285 #define readdir64_r readdir
286 #endif
287 #else /* _LP64 */
288 #ifdef __PRAGMA_REDEFINE_EXTNAME
289 #pragma redefine_extname readdir_r readdir64_r
290 #else
291 #define readdir_r readdir64_r
292 #endif
293 #endif /* _LP64 */
294 extern int readdir_r();

296 #endif /* !_LP64 && _FILE_OFFSET_BITS == 32 */

298 #if defined(_LARGEFILE64_SOURCE) && !((_FILE_OFFSET_BITS == 64) && \
299     !defined(__PRAGMA_REDEFINE_EXTNAME))
300 /* transitional large file interface */
301 extern int readdir64_r();
302 #endif

304 #endif /* __STDC__ */

221 #endif /* defined(__EXTENSIONS__) || defined(_REENTRANT)... */

223 #ifdef __cplusplus
224 }

```

unchanged_portion_omitted

new/usr/src/head/iso/wchar_iso.h

1

```
*****
14989 Sun Jul 27 18:01:20 2014
new/usr/src/head/iso/wchar_iso.h
Fixes for wcstok.
*****
__unchanged_portion_omitted__
274 #else /* __cplusplus >= 199711L */
275 extern wchar_t *wcschr(const wchar_t *, wchar_t);
276 extern wchar_t *wcpbrk(const wchar_t *, const wchar_t *);
277 extern wchar_t *wcsrchr(const wchar_t *, wchar_t);
278 #endif /* __cplusplus >= 199711L */

280 #if (!defined(_MSE_INT_H))
281 #if defined(_XPG4) && !defined(_XPG5) /* XPG4 or XPG4v2 */
282 extern wchar_t *wcstok(wchar_t *_RESTRICT_KYWD, const wchar_t *_RESTRICT_KYWD);
282 extern wchar_t *wcstok(wchar_t *, const wchar_t *);
283 extern size_t wcsftime(wchar_t *, size_t, const char *, const struct tm *);
284 #else /* XPG4 or XPG4v2 */
285 #ifdef __PRAGMA_REDEFINE_EXTNAME
286 #pragma redefine_extname wcstok __wcstok_xpg5
287 #pragma redefine_extname wcsftime __wcsftime_xpg5
288 extern wchar_t *wcstok(wchar_t *_RESTRICT_KYWD, const wchar_t *_RESTRICT_KYWD,
289     wchar_t **_RESTRICT_KYWD);
290 extern size_t wcsftime(wchar_t *_RESTRICT_KYWD, size_t,
291     const wchar_t *_RESTRICT_KYWD, const struct tm *_RESTRICT_KYWD);
292 #else /* __PRAGMA_REDEFINE_EXTNAME */
293 extern wchar_t *__wcstok_xpg5(wchar_t *_RESTRICT_KYWD,
294     const wchar_t *_RESTRICT_KYWD, wchar_t **_RESTRICT_KYWD);
295 extern size_t __wcsftime_xpg5(wchar_t *_RESTRICT_KYWD, size_t,
296     const wchar_t *_RESTRICT_KYWD, const struct tm *_RESTRICT_KYWD);
297 #define wcstok __wcstok_xpg5
298 #define wcsftime __wcsftime_xpg5
299 #endif /* __PRAGMA_REDEFINE_EXTNAME */
300 #endif /* XPG4 or XPG4v2 */
301 #endif /* !defined(_MSE_INT_H) */

303 /* not XPG4 and not XPG4v2 */
304 #if !defined(_XPG4) || defined(_XPG5)
305 extern wint_t btowc(int);
306 extern int fwprintf(__FILE *_RESTRICT_KYWD, const wchar_t *_RESTRICT_KYWD,
307     ...);
308 extern int fwscanf(__FILE *_RESTRICT_KYWD, const wchar_t *_RESTRICT_KYWD,
309     ...);
310 extern int fwide(__FILE *, int);
311 extern int mbsinit(const mbstate_t *);
312 extern size_t mbrlen(const char *_RESTRICT_KYWD, size_t,
313     mbstate_t *_RESTRICT_KYWD);
314 extern size_t mbrtowc(wchar_t *_RESTRICT_KYWD, const char *_RESTRICT_KYWD,
315     size_t, mbstate_t *_RESTRICT_KYWD);
316 extern size_t mbsrtowcs(wchar_t *_RESTRICT_KYWD, const char **_RESTRICT_KYWD,
317     size_t, mbstate_t *_RESTRICT_KYWD);
318 extern int swprintf(wchar_t *_RESTRICT_KYWD, size_t,
319     const wchar_t *_RESTRICT_KYWD, ...);
320 extern int swscanf(const wchar_t *_RESTRICT_KYWD,
321     const wchar_t *_RESTRICT_KYWD, ...);
322 extern int vfwprintf(__FILE *_RESTRICT_KYWD, const wchar_t *_RESTRICT_KYWD,
323     __va_list);
324 extern int vwprintf(const wchar_t *_RESTRICT_KYWD, __va_list);
325 extern int vswprintf(wchar_t *_RESTRICT_KYWD, size_t,
326     const wchar_t *_RESTRICT_KYWD, __va_list);
327 extern size_t wctomb(char *_RESTRICT_KYWD, wchar_t,
328     mbstate_t *_RESTRICT_KYWD);
329 extern size_t wcsrtombs(char *_RESTRICT_KYWD, const wchar_t **_RESTRICT_KYWD,
330     size_t, mbstate_t *_RESTRICT_KYWD);
331 #if defined(_XPG7) || !defined(_STRICT_SYMBOLS)
332 extern size_t wcsnrtombs(char *_RESTRICT_KYWD, const wchar_t **_RESTRICT_KYWD,
```

new/usr/src/head/iso/wchar_iso.h

2

```
333     size_t, size_t, mbstate_t *_RESTRICT_KYWD);
334 #endif
335 extern int wctob(wint_t);
336 extern int wmemcmp(const wchar_t *, const wchar_t *, size_t);
337 extern wchar_t *wmemcpy(wchar_t *_RESTRICT_KYWD,
338     const wchar_t *_RESTRICT_KYWD, size_t);
339 extern wchar_t *wmemmove(wchar_t *, const wchar_t *, size_t);
340 extern wchar_t *wmemset(wchar_t *, wchar_t, size_t);
341 extern int wprintf(const wchar_t *_RESTRICT_KYWD, ...);
342 extern int wscanf(const wchar_t *_RESTRICT_KYWD, ...);
343 #if __cplusplus >= 199711L
344 extern const wchar_t *wcsstr(const wchar_t *, const wchar_t *);
345 extern "C++" {
346     inline wchar_t *wcsstr(wchar_t *__ws1, const wchar_t *__ws2) {
347         return (wchar_t *)wcsstr((const wchar_t *)__ws1, __ws2);
348     }
349 }
__unchanged_portion_omitted__
```

14456 Sun Jul 27 18:01:20 2014

new/usr/src/head/netdb.h

Finished obsoleting interfaces for XPG7.

_____ unchanged portion omitted _____

```

232 #ifdef __STDC__
232 #if !defined(_XPG4_2) || defined(__EXTENSIONS__)
233 struct hostent *gethostbyname_r
234     (const char *, struct hostent *, char *, int, int *h_errnop);
235 struct hostent *gethostbyaddr_r
236     (const char *, int, int, struct hostent *, char *, int, int *h_errnop);
237 struct hostent *getipnodebyname(const char *, int, int, int *);
238 struct hostent *getipnodebyaddr(const void *, size_t, int, int *);
239 void freehostent(struct hostent *);
240 struct hostent *gethostent_r(struct hostent *, char *, int, int *h_errnop);

242 struct servent *getservbyname_r
243     (const char *name, const char *, struct servent *, char *, int);
244 struct servent *getservbyport_r
245     (int port, const char *, struct servent *, char *, int);
246 struct servent *getservent_r(struct servent *, char *, int);

248 struct netent *getnetbyname_r
249     (const char *, struct netent *, char *, int);
250 struct netent *getnetbyaddr_r(long, int, struct netent *, char *, int);
251 struct netent *getnetent_r(struct netent *, char *, int);

253 struct protoent *getprotobyname_r
254     (const char *, struct protoent *, char *, int);
255 struct protoent *getprotobynumber_r
256     (int, struct protoent *, char *, int);
257 struct protoent *getprotoent_r(struct protoent *, char *, int);

259 int getnetgrent_r(char **, char **, char **, char *, int);
260 int innetrgr(const char *, const char *, const char *, const char *);
261 #endif /* !defined(_XPG4_2) || defined(__EXTENSIONS__) */

263 /* Old interfaces that return a pointer to a static area; MT-unsafe */
264 #ifndef _STRICT_XPG7
265 struct hostent *gethostbyname(const char *);
266 #endif
267 struct hostent *gethostent(void);
268 struct netent *getnetbyaddr(in_addr_t, int);
269 struct netent *getnetbyname(const char *);
270 struct netent *getnetent(void);
271 struct protoent *getprotobyname(const char *);
272 struct protoent *getprotobynumber(int);
273 struct protoent *getprotoent(void);
274 struct servent *getservbyname(const char *, const char *);
275 struct servent *getservbyport(int, const char *);
276 struct servent *getservent(void);

278 /*
279  * gethostbyaddr() second argument is a size_t only in unix95/unix98,
280  * removed in XPG issue 7
281  */
282 #if !defined(_STRICT_XPG7)
277 /* gethostbyaddr() second argument is a size_t only in unix95/unix98 */
283 #if !defined(_XPG4_2) || defined(_XPG6) || defined(__EXTENSIONS__)
284 struct hostent *gethostbyaddr(const void *, socklen_t, int);
285 #else
286 struct hostent *gethostbyaddr(const void *, size_t, int);
287 #endif /* !defined(_XPG4_2) || defined(_XPG6) || defined(__EXTENSIONS__) */
288 #endif /* !defined(_STRICT_XPG7) */

```

```

290 #if !defined(_XPG4_2) || defined(__EXTENSIONS__)
291 int endhostent(void);
292 int endnetent(void);
293 int endprotoent(void);
294 int endservent(void);
295 int sethostent(int);
296 int setnetent(int);
297 int setprotoent(int);
298 int setservent(int);
299 #else
300 void endhostent(void);
301 void endnetent(void);
302 void endprotoent(void);
303 void endservent(void);
304 void sethostent(int);
305 void setnetent(int);
306 void setprotoent(int);
307 void setservent(int);
308 #endif /* !defined(_XPG4_2) || defined(__EXTENSIONS__) */

310 #if !defined(_XPG4_2) || defined(_XPG6) || defined(__EXTENSIONS__)

312 #ifdef _XPG6
313 #ifdef __PRAGMA_REDEFINE_EXTNAME
314 #pragma redefine_extname getaddrinfo __xnet_getaddrinfo
315 #else /* __PRAGMA_REDEFINE_EXTNAME */
316 #define getaddrinfo __xnet_getaddrinfo
317 #endif /* __PRAGMA_REDEFINE_EXTNAME */
318 #endif /* _XPG6 */

320 int
321     getaddrinfo(const char *_RESTRICT_KYWD,
322                 const char *_RESTRICT_KYWD,
323                 const struct addrinfo *_RESTRICT_KYWD,
324                 struct addrinfo **_RESTRICT_KYWD);
325 void freeaddrinfo(struct addrinfo *);
326 const char *gai_strerror(int);
327 int getnameinfo(const struct sockaddr *_RESTRICT_KYWD,
328                 socklen_t, char *_RESTRICT_KYWD, socklen_t,
329                 char *_RESTRICT_KYWD, socklen_t, int);
329 #endif /* !defined(_XPG4_2) || defined(_XPG6) || defined(__EXTENSIONS__) */

331 #if !defined(_XPG4_2) || defined(__EXTENSIONS__)
332 int getnetgrent(char **, char **, char **);
333 int setnetgrent(const char *);
334 int endnetgrent(void);
335 int rcmd(char **, unsigned short,
336           const char *, const char *, const char *, int *);
337 int rcmd_af(char **, unsigned short,
338             const char *, const char *, const char *, int *, int);
339 int rresvport_af(int *, int);
340 int rresvport_addr(int *, struct sockaddr_storage *);
341 int rexec(char **, unsigned short,
342           const char *, const char *, const char *, int *);
343 int rexec_af(char **, unsigned short,
344             const char *, const char *, const char *, int *, int);
345 int rresvport(int *);
346 int ruserok(const char *, int, const char *, const char *);
347 /* BIND */
348 struct hostent *gethostbyname2(const char *, int);
349 void herror(const char *);
350 const char *hstrerror(int);
351 /* End BIND */

353 /* IPsec algorithm prototype definitions */
354 struct ipsecalg *getipsecalgbyname(const char *, int, int *);

```

```

355 struct ipsecalgent *getipsecalgbynum(int, int, int *);
356 int getipsecprotobyname(const char *doi_name);
357 char *getipsecprotobynum(int doi_domain);
358 void freeipsecalgent(struct ipsecalgent *ptr);
359 /* END IPsec algorithm prototype definitions */

361 #endif /* !defined(_XPG4_2) || defined(__EXTENSIONS__) */
362 #else /* __STDC__ */
363 struct hostent *gethostbyname_r();
364 struct hostent *gethostbyaddr_r();
365 struct hostent *getipnodebyname();
366 struct hostent *getipnodebyaddr();
367 void freehostent();
368 struct hostent *gethostent_r();
369 struct servent *getservbyname_r();
370 struct servent *getservbyport_r();
371 struct servent *getservernt_r();
372 struct netent *getnetbyname_r();
373 struct netent *getnetbyaddr_r();
374 struct netent *getnetent_r();
375 struct protoent *getprotobyname_r();
376 struct protoent *getprotobynumber_r();
377 struct protoent *getprotoent_r();
378 int getnetgrent_r();
379 int innnetgr();

375 /* Old interfaces that return a pointer to a static area; MT-unsafe */
376 struct hostent *gethostbyname();
377 struct hostent *gethostbyaddr();
378 struct hostent *gethostent();
379 struct netent *getnetbyname();
380 struct netent *getnetbyaddr();
381 struct netent *getnetent();
382 struct servent *getservbyname();
383 struct servent *getservbyport();
384 struct servent *getservernt();
385 struct protoent *getprotobyname();
386 struct protoent *getprotobynumber();
387 struct protoent *getprotoent();
388 int getnetgrent();

390 int sethostent();
391 int endhostent();
392 int setnetent();
393 int endnetent();
394 int setservent();
395 int endservent();
396 int setprotoent();
397 int endprotoent();
398 int setnetgrent();
399 int endnetgrent();
400 int rcmd();
401 int rcmd_af();
402 int rexec();
403 int rexec_af();
404 int rresvport();
405 int rresvport_af();
406 int rresvport_addr();
407 int ruserok();
408 /* BIND */
409 struct hostent *gethostbyname2();
410 void herror();
411 char *hstrerror();
412 /* IPv6 prototype definitons */
413 int getaddrinfo();
414 void freeaddrinfo();

```

```

415 const char *gai_strerror();
416 int getnameinfo();
417 /* END IPv6 prototype definitions */
418 /* End BIND */

420 #if !defined(_XPG4_2) || defined(__EXTENSIONS__)
421 /* IPsec algorithm prototype definitions */
422 struct ipsecalgent *getalgbyname();
423 struct ipsecalgent *getalgbydoi();
424 int getdoidomainbyname();
425 const char *getdoidomainbynum();
426 void freealgent();
427 /* END IPsec algorithm prototype definitions */
428 #endif /* !defined(_XPG4_2) || defined(__EXTENSIONS__) */

430 #endif /* __STDC__ */

432 /*
433  * Error return codes from gethostbyname() and gethostbyaddr()
434  * (when using the resolver)
435  */

436 /* h_errno was removed in Issue 7 */
437 #if !defined(_STRICT_XPG7)
438 extern int h_errno;

439 #ifdef _REENTRANT
440 #ifdef __STDC__
441 extern int *__h_errno(void);
442 #else
443 extern int *__h_errno();
444 #endif /* __STDC__ */

445 /* Only #define h_errno if there is no conflict with other use */
446 #ifdef H_ERRNO_IS_FUNCTION
447 #define h_errno (*__h_errno())
448 #endif /* NO_H_ERRNO_DEFINE */
449 #endif /* _REENTRANT */

450 /*
451  * Error return codes from gethostbyname() and gethostbyaddr()
452  * (left in extern int h_errno).
453  */
454 #define HOST_NOT_FOUND 1 /* Authoritative Answer Host not found */
455 #define TRY_AGAIN 2 /* Non-Authoritative Host not found, or SERVERFAIL */
456 #define NO_RECOVERY 3 /* Non recoverable errors, FORMERR, REFUSED, NOTIMP */
457 #define NO_DATA 4 /* Valid name, no data record of requested type */

458 #if !defined(_XPG4_2) || defined(__EXTENSIONS__)
459 #define NO_ADDRESS NO_DATA /* no address, look for MX record */
460 #endif /* BIND */

461 #define NETDB_INTERNAL -1 /* see errno */
462 #define NETDB_SUCCESS 0 /* no problem */
463 /* End BIND */

464 #endif /* !defined(_STRICT_XPG7) */

465 #define MAXHOSTNAMELEN 256

466 #define MAXALIASES 35
467 #define MAXADDRES 35
468 #endif /* !defined(_XPG4_2) || defined(__EXTENSIONS__) */

469 #ifdef __cplusplus
470 }
471 #endif

```

unchanged_portion_omitted

new/usr/src/head/pthread.h

1

```
*****
13864 Sun Jul 27 18:01:20 2014
new/usr/src/head/pthread.h
pthread_attr_setstackaddr removed in XPG7
*****
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 2008 Sun Microsystems, Inc. All rights reserved.
24  * Use is subject to license terms.
25 */
26
27 /*
28  * Copyright 2014 Garrett D'Amore <garrett@damore.org>
29 */
30
31 #ifndef _PTHREAD_H
32 #define _PTHREAD_H
33
34 #include <sys/feature_tests.h>
35
36 #ifndef _ASM
37 #include <sys/types.h>
38 #include <time.h>
39 #include <sched.h>
40 #endif /* _ASM */
41
42 #ifdef __cplusplus
43 extern "C" {
44 #endif
45
46 /*
47  * Thread related attribute values defined as in thread.h.
48  * These are defined as bit pattern in thread.h.
49  * Any change here should be reflected in thread.h.
50 */
51 /* detach */
52 #define PTHREAD_CREATE_DETACHED 0x40 /* = THR_DETACHED */
53 #define PTHREAD_CREATE_JOINABLE 0
54 /* scope */
55 #define PTHREAD_SCOPE_SYSTEM 0x01 /* = THR_BOUND */
56 #define PTHREAD_SCOPE_PROCESS 0
57
58 /*
59  * Other attributes which are not defined in thread.h
60 */
61 /* inherit */
```

new/usr/src/head/pthread.h

2

```
62 #define PTHREAD_INHERIT_SCHED 1
63 #define PTHREAD_EXPLICIT_SCHED 0
64
65 /*
66  * Value of process-shared attribute
67  * These are defined as values defined in sys/synch.h
68  * Any change here should be reflected in sys/synch.h.
69 */
70 #define PTHREAD_PROCESS_SHARED 1 /* = USYNC_PROCESS */
71 #define PTHREAD_PROCESS_PRIVATE 0 /* = USYNC_THREAD */
72
73 #define _DEFAULT_TYPE PTHREAD_PROCESS_PRIVATE
74 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
75 #define DEFAULT_TYPE _DEFAULT_TYPE
76 #endif
77
78 /*
79  * mutex types
80  * keep these in synch which sys/synch.h lock flags
81 */
82 #define PTHREAD_MUTEX_NORMAL 0x0
83 #define PTHREAD_MUTEX_ERRORCHECK 0x2
84 #define PTHREAD_MUTEX_RECURSIVE 0x4
85 #define PTHREAD_MUTEX_DEFAULT PTHREAD_MUTEX_NORMAL
86
87 /*
88  * Mutex protocol values. Keep these in synch with sys/synch.h lock types.
89 */
90 #define PTHREAD_PRIO_NONE 0x0
91 #define PTHREAD_PRIO_INHERIT 0x10
92 #define PTHREAD_PRIO_PROTECT 0x20
93
94 /*
95  * Mutex robust attribute values.
96  * Keep these in synch with sys/synch.h lock types.
97 */
98 #define PTHREAD_MUTEX_STALLED 0x0
99 #define PTHREAD_MUTEX_ROBUST 0x40
100 /*
101  * Historical solaris-specific names,
102  * from before pthread_mutexattr_getrobust() became standardized
103 */
104 #define PTHREAD_MUTEX_STALL_NP PTHREAD_MUTEX_STALLED
105 #define PTHREAD_MUTEX_ROBUST_NP PTHREAD_MUTEX_ROBUST
106
107 /*
108  * macros - default initializers defined as in synch.h
109  * Any change here should be reflected in synch.h.
110 */
111 * NOTE:
112 * Make sure that any change in the macros is consistent with the definition
113 * of the corresponding types in sys/types.h (e.g. PTHREAD_MUTEX_INITIALIZER
114 * should be consistent with the definition for pthread_mutex_t).
115 */
116 #define PTHREAD_MUTEX_INITIALIZER /* = DEFAULTMUTEX */ \
117     {{0, 0, 0, _DEFAULT_TYPE, _MUTEX_MAGIC}, {{0}}, 0}
118
119 #define PTHREAD_COND_INITIALIZER /* = DEFAULTCV */ \
120     {{{0, 0, 0, 0}, _DEFAULT_TYPE, _COND_MAGIC}, 0}
121
122 #define PTHREAD_RWLOCK_INITIALIZER /* = DEFAULTRWLOCK */ \
123     {0, _DEFAULT_TYPE, _RWL_MAGIC, PTHREAD_MUTEX_INITIALIZER, \
124     PTHREAD_COND_INITIALIZER, PTHREAD_COND_INITIALIZER}
125
126 /* cancellation type and state */
127 #define PTHREAD_CANCEL_ENABLE 0x00
```

```

128 #define PTHREAD_CANCEL_DISABLE      0x01
129 #define PTHREAD_CANCEL_DEFERRED     0x00
130 #define PTHREAD_CANCEL_ASYNCHRONOUS 0x02
131 #define PTHREAD_CANCELED             (void *)-19

133 /* pthread_once related values */
134 #define PTHREAD_ONCE_NOTDONE        0
135 #define PTHREAD_ONCE_DONE           1
136 #define PTHREAD_ONCE_INIT            { {0, 0, 0, PTHREAD_ONCE_NOTDONE} }

138 /*
139  * The key to be created by pthread_key_create_once_np()
140  * must be statically initialized with PTHREAD_ONCE_KEY_NP.
141  * This must be the same as THR_ONCE_KEY in <thread.h>
142  */
143 #define PTHREAD_ONCE_KEY_NP          (pthread_key_t){-1}

145 /* barriers */
146 #define PTHREAD_BARRIER_SERIAL_THREAD -2

148 #ifndef _ASM

150 /*
151  * cancellation cleanup structure
152  */
153 typedef struct _cleanup {
154     uintptr_t      pthread_cleanup_pad[4];
155 } _cleanup_t;
156 unchanged portion omitted

186 #ifdef __STDC__

190 /*
191  * function prototypes - thread related calls
192  */

194 /*
195  * pthread_atfork() is also declared in <unistd.h> as per SUSv2. The
196  * declarations are identical. A change to either one may also require
197  * appropriate namespace updates in order to avoid redeclaration
198  * warnings in the case where both prototypes are exposed via inclusion
199  * of both <pthread.h> and <unistd.h>.
200  */
201 extern int pthread_atfork(void (*) (void), void (*) (void), void (*) (void));
202 extern int pthread_attr_init(pthread_attr_t *);
203 extern int pthread_attr_destroy(pthread_attr_t *);
204 extern int pthread_attr_setstack(pthread_attr_t *, void *, size_t);
205 extern int pthread_attr_getstack(const pthread_attr_t *_RESTRICT_KYWD,
206     void **_RESTRICT_KYWD, size_t *_RESTRICT_KYWD);
207 extern int pthread_attr_setstacksize(pthread_attr_t *, size_t);
208 extern int pthread_attr_getstacksize(const pthread_attr_t *_RESTRICT_KYWD,
209     size_t *_RESTRICT_KYWD);

211 #if !defined(_STRICT_SYMBOLS) && !defined(_XPG7)
212 extern int pthread_attr_setstackaddr(pthread_attr_t *, void *);
213 extern int pthread_attr_getstackaddr(const pthread_attr_t *_RESTRICT_KYWD,
214     void **_RESTRICT_KYWD);
215 #endif

217 extern int pthread_attr_setdetachstate(pthread_attr_t *, int);
218 extern int pthread_attr_getdetachstate(const pthread_attr_t *, int *);
219 extern int pthread_attr_setscope(pthread_attr_t *, int);
220 extern int pthread_attr_getscope(const pthread_attr_t *_RESTRICT_KYWD,
221     int *_RESTRICT_KYWD);
222 extern int pthread_attr_setinheritsched(pthread_attr_t *, int);
223 extern int pthread_attr_getinheritsched(const pthread_attr_t *_RESTRICT_KYWD,

```

```

224     int *_RESTRICT_KYWD);
225 extern int pthread_attr_setschedpolicy(pthread_attr_t *, int);
226 extern int pthread_attr_getschedpolicy(const pthread_attr_t *_RESTRICT_KYWD,
227     int *_RESTRICT_KYWD);
228 extern int pthread_attr_setschedparam(pthread_attr_t *_RESTRICT_KYWD,
229     const struct sched_param *_RESTRICT_KYWD);
230 extern int pthread_attr_getschedparam(const pthread_attr_t *_RESTRICT_KYWD,
231     struct sched_param *_RESTRICT_KYWD);
232 extern int pthread_create(pthread_t *_RESTRICT_KYWD,
233     const pthread_attr_t *_RESTRICT_KYWD, void * (*)(void *),
234     void *_RESTRICT_KYWD);
235 extern int pthread_once(pthread_once_t *, void (*)(void));
236 extern int pthread_join(pthread_t, void **);
237 extern int pthread_detach(pthread_t);
238 extern void pthread_exit(void *) _NORETURN;
239 extern int pthread_cancel(pthread_t);
240 extern int pthread_setschedparam(pthread_t, int, const struct sched_param *);
241 extern int pthread_getschedparam(pthread_t, int *_RESTRICT_KYWD,
242     struct sched_param *_RESTRICT_KYWD);
243 extern int pthread_setschedprio(pthread_t, int);
244 extern int pthread_setcancelstate(int, int *);
245 extern int pthread_setcanceltype(int, int *);
246 extern void pthread_testcancel(void);
247 extern int pthread_equal(pthread_t, pthread_t);
248 extern int pthread_key_create(pthread_key_t *, void (*)(void *));
249 extern int pthread_key_create_once_np(pthread_key_t *, void (*)(void *));
250 extern int pthread_key_delete(pthread_key_t);
251 extern int pthread_setspecific(pthread_key_t, const void *);
252 extern void *pthread_getspecific(pthread_key_t);
253 extern pthread_t pthread_self(void);

255 /*
256  * function prototypes - synchronization related calls
257  */
258 extern int pthread_mutexattr_init(pthread_mutexattr_t *);
259 extern int pthread_mutexattr_destroy(pthread_mutexattr_t *);
260 extern int pthread_mutexattr_setpshared(pthread_mutexattr_t *, int);
261 extern int pthread_mutexattr_getpshared(
262     const pthread_mutexattr_t *_RESTRICT_KYWD, int *_RESTRICT_KYWD);
263 extern int pthread_mutexattr_setprotocol(pthread_mutexattr_t *, int);
264 extern int pthread_mutexattr_getprotocol(
265     const pthread_mutexattr_t *_RESTRICT_KYWD, int *_RESTRICT_KYWD);
266 extern int pthread_mutexattr_setprioceiling(pthread_mutexattr_t *, int);
267 extern int pthread_mutexattr_getprioceiling(
268     const pthread_mutexattr_t *_RESTRICT_KYWD, int *_RESTRICT_KYWD);
269 extern int pthread_mutexattr_setrobust(pthread_mutexattr_t *, int);
270 extern int pthread_mutexattr_getrobust(
271     const pthread_mutexattr_t *_RESTRICT_KYWD, int *_RESTRICT_KYWD);
272 extern int pthread_mutex_init(pthread_mutex_t *_RESTRICT_KYWD,
273     const pthread_mutexattr_t *_RESTRICT_KYWD);
274 extern int pthread_mutex_consistent(pthread_mutex_t *);
275 extern int pthread_mutex_destroy(pthread_mutex_t *);
276 extern int pthread_mutex_lock(pthread_mutex_t *);
277 extern int pthread_mutex_timedlock(pthread_mutex_t *_RESTRICT_KYWD,
278     const struct timespec *_RESTRICT_KYWD);
279 extern int pthread_mutex_reltimedlock_np(pthread_mutex_t *_RESTRICT_KYWD,
280     const struct timespec *_RESTRICT_KYWD);
281 extern int pthread_mutex_unlock(pthread_mutex_t *);
282 extern int pthread_mutex_trylock(pthread_mutex_t *);
283 extern int pthread_mutex_setprioceiling(pthread_mutex_t *_RESTRICT_KYWD,
284     int, int *_RESTRICT_KYWD);
285 extern int pthread_mutex_getprioceiling(const pthread_mutex_t *_RESTRICT_KYWD,
286     int *_RESTRICT_KYWD);
287 extern int pthread_condattr_init(pthread_condattr_t *);
288 extern int pthread_condattr_destroy(pthread_condattr_t *);
289 extern int pthread_condattr_setclock(pthread_condattr_t *, clockid_t);

```

```

290 extern int pthread_condattr_getclock(const pthread_condattr_t *_RESTRICT_KYWD,
291     clockid_t *_RESTRICT_KYWD);
292 extern int pthread_condattr_setpshared(pthread_condattr_t *, int);
293 extern int pthread_condattr_getpshared(const pthread_condattr_t *_RESTRICT_KYWD,
294     int *_RESTRICT_KYWD);
295 extern int pthread_cond_init(pthread_cond_t *_RESTRICT_KYWD,
296     const pthread_condattr_t *_RESTRICT_KYWD);
297 extern int pthread_cond_destroy(pthread_cond_t *);
298 extern int pthread_cond_broadcast(pthread_cond_t *);
299 extern int pthread_cond_signal(pthread_cond_t *);
300 extern int pthread_cond_wait(pthread_cond_t *_RESTRICT_KYWD,
301     pthread_mutex_t *_RESTRICT_KYWD);
302 extern int pthread_cond_timedwait(pthread_cond_t *_RESTRICT_KYWD,
303     pthread_mutex_t *_RESTRICT_KYWD, const struct timespec *_RESTRICT_KYWD);
304 extern int pthread_cond_reltimedwait_np(pthread_cond_t *_RESTRICT_KYWD,
305     pthread_mutex_t *_RESTRICT_KYWD, const struct timespec *_RESTRICT_KYWD);
306 extern int pthread_attr_getguardsize(const pthread_attr_t *_RESTRICT_KYWD,
307     size_t *_RESTRICT_KYWD);
308 extern int pthread_attr_setguardsize(pthread_attr_t *, size_t);
309 extern int pthread_getconcurrency(void);
310 extern int pthread_setconcurrency(int);
311 extern int pthread_mutexattr_settype(pthread_mutexattr_t *, int);
312 extern int pthread_mutexattr_gettype(const pthread_mutexattr_t *_RESTRICT_KYWD,
313     int *_RESTRICT_KYWD);
314 extern int pthread_rwlock_init(pthread_rwlock_t *_RESTRICT_KYWD,
315     const pthread_rwlockattr_t *_RESTRICT_KYWD);
316 extern int pthread_rwlock_destroy(pthread_rwlock_t *);
317 extern int pthread_rwlock_rdlock(pthread_rwlock_t *);
318 extern int pthread_rwlock_timedrdlock(pthread_rwlock_t *_RESTRICT_KYWD,
319     const struct timespec *_RESTRICT_KYWD);
320 extern int pthread_rwlock_reltimedrdlock_np(pthread_rwlock_t *_RESTRICT_KYWD,
321     const struct timespec *_RESTRICT_KYWD);
322 extern int pthread_rwlock_tryrdlock(pthread_rwlock_t *);
323 extern int pthread_rwlock_wrlock(pthread_rwlock_t *);
324 extern int pthread_rwlock_timedwrlock(pthread_rwlock_t *_RESTRICT_KYWD,
325     const struct timespec *_RESTRICT_KYWD);
326 extern int pthread_rwlock_reltimedwrlock_np(pthread_rwlock_t *_RESTRICT_KYWD,
327     const struct timespec *_RESTRICT_KYWD);
328 extern int pthread_rwlock_trywrlock(pthread_rwlock_t *);
329 extern int pthread_rwlock_unlock(pthread_rwlock_t *);
330 extern int pthread_rwlockattr_init(pthread_rwlockattr_t *);
331 extern int pthread_rwlockattr_destroy(pthread_rwlockattr_t *);
332 extern int pthread_rwlockattr_getpshared(
333     const pthread_rwlockattr_t *_RESTRICT_KYWD, int *_RESTRICT_KYWD);
334 extern int pthread_rwlockattr_setpshared(pthread_rwlockattr_t *, int);
335 extern int pthread_spin_init(pthread_spinlock_t *, int);
336 extern int pthread_spin_destroy(pthread_spinlock_t *);
337 extern int pthread_spin_lock(pthread_spinlock_t *);
338 extern int pthread_spin_trylock(pthread_spinlock_t *);
339 extern int pthread_spin_unlock(pthread_spinlock_t *);
340 extern int pthread_barrierattr_init(pthread_barrierattr_t *);
341 extern int pthread_barrierattr_destroy(pthread_barrierattr_t *);
342 extern int pthread_barrierattr_setpshared(pthread_barrierattr_t *, int);
343 extern int pthread_barrierattr_getpshared(
344     const pthread_barrierattr_t *_RESTRICT_KYWD, int *_RESTRICT_KYWD);
345 extern int pthread_barrier_init(pthread_barrier_t *_RESTRICT_KYWD,
346     const pthread_barrierattr_t *_RESTRICT_KYWD, uint_t);
347 extern int pthread_barrier_destroy(pthread_barrier_t *);
348 extern int pthread_barrier_wait(pthread_barrier_t *);

350 /* Historical names -- present only for binary compatibility */
351 extern int pthread_mutex_consistent_np(pthread_mutex_t *);
352 extern int pthread_mutexattr_setrobust_np(pthread_mutexattr_t *, int);
353 extern int pthread_mutexattr_getrobust_np(
354     const pthread_mutexattr_t *_RESTRICT_KYWD, int *_RESTRICT_KYWD);

```

```

350 #else /* __STDC__ */

352 /*
353  * function prototypes - thread related calls
354  */
355 extern int pthread_atfork();
356 extern int pthread_attr_init();
357 extern int pthread_attr_destroy();
358 extern int pthread_attr_setstack();
359 extern int pthread_attr_getstack();
360 extern int pthread_attr_setstacksize();
361 extern int pthread_attr_getstacksize();
362 extern int pthread_attr_setstackaddr();
363 extern int pthread_attr_getstackaddr();
364 extern int pthread_attr_setdetachstate();
365 extern int pthread_attr_getdetachstate();
366 extern int pthread_attr_setscope();
367 extern int pthread_attr_getscope();
368 extern int pthread_attr_setinheritsched();
369 extern int pthread_attr_getinheritsched();
370 extern int pthread_attr_setschedpolicy();
371 extern int pthread_attr_getschedpolicy();
372 extern int pthread_attr_setschedparam();
373 extern int pthread_attr_getschedparam();
374 extern int pthread_create();
375 extern int pthread_once();
376 extern int pthread_join();
377 extern int pthread_detach();
378 extern void pthread_exit();
379 extern int pthread_cancel();
380 extern int pthread_setschedparam();
381 extern int pthread_getschedparam();
382 extern int pthread_setschedprio();
383 extern int pthread_setcancelstate();
384 extern int pthread_setcanceltype();
385 extern void pthread_testcancel();
386 extern int pthread_equal();
387 extern int pthread_key_create();
388 extern int pthread_key_create_once_np();
389 extern int pthread_key_delete();
390 extern int pthread_setspecific();
391 extern void *pthread_getspecific();
392 extern pthread_t pthread_self();
393 /*
394  * function prototypes - synchronization related calls
395  */
396 extern int pthread_mutexattr_init();
397 extern int pthread_mutexattr_destroy();
398 extern int pthread_mutexattr_setpshared();
399 extern int pthread_mutexattr_getpshared();
400 extern int pthread_mutexattr_setprotocol();
401 extern int pthread_mutexattr_getprotocol();
402 extern int pthread_mutexattr_setprioceiling();
403 extern int pthread_mutexattr_getprioceiling();
404 extern int pthread_mutexattr_setrobust();
405 extern int pthread_mutexattr_getrobust();
406 extern int pthread_mutex_init();
407 extern int pthread_mutex_consistent();
408 extern int pthread_mutex_destroy();
409 extern int pthread_mutex_lock();
410 extern int pthread_mutex_timedlock();
411 extern int pthread_mutex_reltimedlock_np();
412 extern int pthread_mutex_unlock();
413 extern int pthread_mutex_trylock();
414 extern int pthread_mutex_setprioceiling();
415 extern int pthread_mutex_getprioceiling();

```

```
416 extern int pthread_condattr_init();
417 extern int pthread_condattr_destroy();
418 extern int pthread_condattr_setclock();
419 extern int pthread_condattr_getclock();
420 extern int pthread_condattr_setpshared();
421 extern int pthread_condattr_getpshared();
422 extern int pthread_cond_init();
423 extern int pthread_cond_destroy();
424 extern int pthread_cond_broadcast();
425 extern int pthread_cond_signal();
426 extern int pthread_cond_wait();
427 extern int pthread_cond_timedwait();
428 extern int pthread_cond_reltimedwait_np();
429 extern int pthread_attr_getguardsize();
430 extern int pthread_attr_setguardsize();
431 extern int pthread_getconcurrency();
432 extern int pthread_setconcurrency();
433 extern int pthread_mutexattr_settype();
434 extern int pthread_mutexattr_gettype();
435 extern int pthread_rwlock_init();
436 extern int pthread_rwlock_destroy();
437 extern int pthread_rwlock_rdlock();
438 extern int pthread_rwlock_tryrdlock();
439 extern int pthread_rwlock_wrlock();
440 extern int pthread_rwlock_trywrlock();
441 extern int pthread_rwlock_unlock();
442 extern int pthread_rwlockattr_init();
443 extern int pthread_rwlockattr_destroy();
444 extern int pthread_rwlockattr_getpshared();
445 extern int pthread_rwlockattr_setpshared();
446 extern int pthread_spin_init();
447 extern int pthread_spin_destroy();
448 extern int pthread_spin_lock();
449 extern int pthread_spin_trylock();
450 extern int pthread_spin_unlock();
451 extern int pthread_barrierattr_init();
452 extern int pthread_barrierattr_destroy();
453 extern int pthread_barrierattr_setpshared();
454 extern int pthread_barrierattr_getpshared();
455 extern int pthread_barrier_init();
456 extern int pthread_barrier_destroy();
457 extern int pthread_barrier_wait();

459 /* Historical names -- present only for binary compatibility */
460 extern int pthread_mutex_consistent_np();
461 extern int pthread_mutexattr_setrobust_np();
462 extern int pthread_mutexattr_getrobust_np();

464 #endif /* __STDC__ */

356 #endif /* _ASM */

358 #ifdef __cplusplus
359 }
    unchanged_portion_omitted_
```

new/usr/src/head/signal.h

1

```
*****
5482 Sun Jul 27 18:01:20 2014
new/usr/src/head/signal.h
first round of POSIX 2008 stuff
*****

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, Version 1.0 only
6  * (the "License"). You may not use this file except in compliance
7  * with the License.
8  *
9  * You can obtain a copy of the license at usr/src/OPENSOLARIS.LICENSE
10 * or http://www.opensolaris.org/os/licensing.
11 * See the License for the specific language governing permissions
12 * and limitations under the License.
13 *
14 * When distributing Covered Code, include this CDDL HEADER in each
15 * file and include the License file at usr/src/OPENSOLARIS.LICENSE.
16 * If applicable, add the following below this CDDL HEADER, with the
17 * fields enclosed by brackets "[]" replaced with your own identifying
18 * information: Portions Copyright [yyyy] [name of copyright owner]
19 *
20 * CDDL HEADER END
21 */
22 /*      Copyright (c) 1988 AT&T */
23 /*      All Rights Reserved      */

26 /*
27  * Copyright 2004 Sun Microsystems, Inc.  All rights reserved.
28  * Use is subject to license terms.
29  */

31 #ifndef _SIGNAL_H
32 #define _SIGNAL_H

34 #pragma ident      "%Z%M% %I%      %E% SMI"      /* SVr4.0 1.5.3.4 */

34 #include <sys/feature_tests.h>

36 #if defined(__EXTENSIONS__) || !defined(_STRICT_STDC) || \
37     defined(__XOPEN_OR_POSIX)
38 #include <sys/types.h> /* need pid_t/uid_t/size_t/clock_t/caddr_t/pthread_t */
39 #endif

41 #include <iso/signal_iso.h>
42 #include <sys/signal.h>

44 /*
45  * Allow global visibility for symbols defined in
46  * C++ "std" namespace in <iso/signal_iso.h>.
47  */
48 #if __cplusplus >= 199711L
49 using std::sig_atomic_t;
50 using std::signal;
51 using std::raise;
52 #endif

54 #ifdef __cplusplus
55 extern "C" {
56 #endif

61 #if defined(__STDC__)
```

new/usr/src/head/signal.h

2

```
59 extern const char      **_sys_siglistp;      /* signal descriptions */
60 extern const int        _sys_siglistn;        /* # of signal descriptions */

62 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX)
63 #define _sys_siglist      _sys_siglistp
64 #define _sys_nsig         _sys_siglistn
65 #endif

67 #if defined(__EXTENSIONS__) || !defined(_STRICT_STDC) || \
68     defined(__XOPEN_OR_POSIX)
69 extern int kill(pid_t, int);
70 extern int sigaction(int, const struct sigaction *_RESTRICT_KYWD,
71     struct sigaction *_RESTRICT_KYWD);
72 #ifndef _KERNEL
73 extern int sigaddset(sigset_t *, int);
74 extern int sigdelset(sigset_t *, int);
75 extern int sigemptyset(sigset_t *);
76 extern int sigfillset(sigset_t *);
77 extern int sigismember(const sigset_t *, int);
78 #endif
79 extern int sigpending(sigset_t *);
80 extern int sigprocmask(int, const sigset_t *_RESTRICT_KYWD,
81     sigset_t *_RESTRICT_KYWD);
82 extern int sigsuspend(const sigset_t *);
83 #endif /* defined(__EXTENSIONS__) || !defined(_STRICT_STDC)... */

85 #if defined(__EXTENSIONS__) || (!defined(_STRICT_STDC) && \
86     !defined(__XOPEN_OR_POSIX))
87 #include <sys/procset.h>
88 extern int gsignal(int);
89 extern int (*ssignal(int, int (*)(int)))(int);
90 extern int sigsend(idtype_t, id_t, int);
91 extern int sigsendset(const procset_t *, int);
92 extern int sig2str(int, char *);
93 extern int str2sig(const char *, int *);
94 #define SIG2STR_MAX      32
95 #endif /* defined(__EXTENSIONS__) || (!defined(_STRICT_STDC)... */

97 /* Added in Issue 4 version 2, obsoleted in Issue 6 and removed in Issue 7 */
98 #if (!defined(_STRICT_SYMBOLS)) || (defined(_XPG4_2) && !defined(_XPG7))
99 /* bsd_signal removed from Issue 7 */
101 #if defined(__EXTENSIONS__) || (!defined(_STRICT_STDC) && \
102     !defined(__XOPEN_OR_POSIX)) || defined(_XPG4_2)
103 extern void (*bsd_signal(int, void (*)(int)))(int);
104 #endif

103 /* Added in Issue 4 version 2 */
104 #if (!defined(_STRICT_SYMBOLS)) || defined(_XPG4_2)
105 extern int killpg(pid_t, int);
106 extern int siginterrupt(int, int);
107 extern int sigaltstack(const stack_t *_RESTRICT_KYWD, stack_t *_RESTRICT_KYWD);
108 extern int sighold(int);
109 extern int sigignore(int);
110 extern int sigpause(int);
111 extern int sigrelse(int);
112 extern void (*sigset(int, void (*)(int)))(int);
113 #endif
112 #endif /* defined(__EXTENSIONS__) || (!defined(_STRICT_STDC) && ... */

115 /* Added in Issue 4 version 2, obsoleted in SUSv2 and removed in SUSv3 */
116 #if (!defined(_STRICT_SYMBOLS)) || (defined(_XPG4_2) && !defined(_XPG6))
114 /* Marked as LEGACY in SUSv2 and removed in SUSv3 */
115 #if defined(__EXTENSIONS__) || \
116     (!defined(_STRICT_STDC) && !defined(__XOPEN_OR_POSIX)) || \
117     (defined(_XPG4_2) && !defined(_XPG6))
```



```

117 extern int sigstack(struct sigstack *, struct sigstack *);
118 #endif

120 #if defined(__EXTENSIONS__) || (!defined(_STRICT_STDC) && \
121     !defined(__XOPEN_OR_POSIX)) || (_POSIX_C_SOURCE > 2)
122 #include <sys/siginfo.h>
123 #include <time.h>
124 extern int pthread_kill(pthread_t, int);
125 extern int pthread_sigmask(int, const sigset_t *_RESTRICT_KYWD,
126     sigset_t *_RESTRICT_KYWD);
127 extern int sigwaitinfo(const sigset_t *_RESTRICT_KYWD,
128     siginfo_t *_RESTRICT_KYWD);
129 extern int sigtimedwait(const sigset_t *_RESTRICT_KYWD,
130     siginfo_t *_RESTRICT_KYWD, const struct timespec *_RESTRICT_KYWD);
131 extern int sigqueue(pid_t, int, const union sigval);
132 #endif /* defined(__EXTENSIONS__) || (!defined(_STRICT_STDC) && */

135 #else /* __STDC__ */

137 extern char **_sys_siglistp; /* signal descriptions */
138 extern int _sys_siglistn; /* # of signal descriptions */

140 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX)
141 #define _sys_siglist _sys_siglistp
142 #define _sys_nsig _sys_siglistn
143 #endif

145 #if defined(__EXTENSIONS__) || defined(__XOPEN_OR_POSIX)
146 extern int kill();
147 extern int sigaction();
148 #ifndef _KERNEL
149 extern int sigaddset();
150 extern int sigdelset();
151 extern int sigemptyset();
152 extern int sigfillset();
153 extern int sigismember();
154 #endif
155 extern int sigpending();
156 extern int sigprocmask();
157 extern int sigsuspend();
158 #endif /* defined(__EXTENSIONS__)... */

160 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) || \
161     defined(_XPG4_2)
162 extern void (*bsd_signal())();
163 extern int killpg();
164 extern int siginterrupt();
165 #endif /* defined(__EXTENSIONS__) ... */

167 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) || \
168     (defined(_XPG4_2) && !defined(_XPG6))
169 extern int sigstack();
170 #endif

172 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX)
173 extern int gsignal();
174 extern int (*ssignal)();
175 extern int sigsend();
176 extern int sigsendset();
177 extern int sig2str();
178 extern int str2sig();
179 #define SIG2STR_MAX 32
180 #endif

182 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) || \
183     defined(_XPG4_2)

```

```

184 extern int sigaltstack();
185 extern int sighold();
186 extern int sigignore();
187 extern int sigpause();
188 extern int sigrelse();
189 extern void (*sigset())();
190 #endif

192 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) || \
193     (_POSIX_C_SOURCE > 2)
194 #include <sys/siginfo.h>
195 #include <sys/time.h>
196 extern int pthread_kill();
197 extern int pthread_sigmask();
198 extern int sigwaitinfo();
199 extern int sigtimedwait();
200 extern int sigqueue();
201 #endif

203 #endif /* __STDC__ */

213 #if defined(__STDC__)

214 /*
215  * sigwait() prototype is defined here.
216  */

218 #if defined(__EXTENSIONS__) || (!defined(_STRICT_STDC) && \
219     !defined(__XOPEN_OR_POSIX)) || (_POSIX_C_SOURCE - 0 >= 199506L) || \
220     defined(_POSIX_PTHREAD_SEMANTICS)

222 #if defined(__STDC__)

224 #if (_POSIX_C_SOURCE - 0 >= 199506L) || defined(_POSIX_PTHREAD_SEMANTICS)

226 #ifdef __PRAGMA_REDEFINE_EXTNAME
227 #pragma redefine_extname sigwait __posix_sigwait
228 extern int sigwait(const sigset_t *_RESTRICT_KYWD, int *_RESTRICT_KYWD);
229 #else /* __PRAGMA_REDEFINE_EXTNAME */

231 extern int __posix_sigwait(const sigset_t *_RESTRICT_KYWD,
232     int *_RESTRICT_KYWD);

234 #ifdef __lint
235 #define sigwait __posix_sigwait
236 #else /* !__lint */

238 static int
239 sigwait(const sigset_t *_RESTRICT_KYWD __setp, int *_RESTRICT_KYWD __signo)
240 {
241     return (__posix_sigwait(__setp, __signo));
242 }

244 #endif /* !__lint */
245 #endif /* __PRAGMA_REDEFINE_EXTNAME */

247 #else /* (_POSIX_C_SOURCE - 0 >= 199506L) || ... */

249 extern int sigwait(sigset_t *);

251 #endif /* (_POSIX_C_SOURCE - 0 >= 199506L) || ... */

253 #else /* __STDC__ */

255 #if (_POSIX_C_SOURCE - 0 >= 199506L) || defined(_POSIX_PTHREAD_SEMANTICS)

```

```
250 #ifdef __PRAGMA_REDEFINE_EXTNAME
251 #pragma redefine_extname sigwait __posix_sigwait
252 extern int sigwait();
253 #else /* __PRAGMA_REDEFINE_EXTNAME */

255 extern int __posix_sigwait();

257 #ifdef __lint
258 #define sigwait __posix_sigwait
259 #else /* !__lint */

261 static int
262 sigwait(__setp, __signo)
263     sigset_t *__setp;
264     int *__signo;
265 {
266     return (__posix_sigwait(__setp, __signo));
267 }

269 #endif /* !__lint */
270 #endif /* __PRAGMA_REDEFINE_EXTNAME */

272 #else /* (_POSIX_C_SOURCE - 0 >= 199506L) || ... */

274 extern int sigwait();

276 #endif /* (_POSIX_C_SOURCE - 0 >= 199506L) || ... */

278 #endif /* __STDC__ */

171 #endif /* defined(__EXTENSIONS__) || (!defined(_STRICT_STDC) ... */

173 #ifdef __cplusplus
174 }
__unchanged_portion_omitted__
```

new/usr/src/head/stdlib.h

1

```
*****
8367 Sun Jul 27 18:01:20 2014
new/usr/src/head/stdlib.h
first round of POSIX 2008 stuff
*****
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 Garrett D'Amore <garrett@damore.org>
24  * Copyright (c) 2013 Gary Mills
25  *
26  * Copyright (c) 1989, 2010, Oracle and/or its affiliates. All rights reserved.
27  */
28
29 /* Copyright (c) 2013, OmniTI Computer Consulting, Inc. All rights reserved. */
30
31 /*      Copyright (c) 1988 AT&T */
32 /*      All Rights Reserved      */
33
34 #ifndef _STDLIB_H
35 #define _STDLIB_H
36
37 #include <iso/stdlib_iso.h>
38 #include <iso/stdlib_c99.h>
39
40 #if defined(__EXTENSIONS__) || defined(_XPG4)
41 #include <sys/wait.h>
42 #endif
43
44 /*
45  * Allow global visibility for symbols defined in
46  * C++ "std" namespace in <iso/stdlib_iso.h>.
47  */
48 #if __cplusplus >= 199711L
49 using std::div_t;
50 using std::ldiv_t;
51 using std::size_t;
52 using std::abort;
53 using std::abs;
54 using std::atexit;
55 using std::atof;
56 using std::atoi;
57 using std::atol;
58 using std::bsearch;
59 using std::calloc;
60 using std::div;
61 using std::exit;
```

new/usr/src/head/stdlib.h

2

```
62 using std::free;
63 using std::getenv;
64 using std::labs;
65 using std::ldiv;
66 using std::malloc;
67 using std::mblen;
68 using std::mbstowcs;
69 using std::mbtowc;
70 using std::qsort;
71 using std::rand;
72 using std::realloc;
73 using std::srand;
74 using std::strtod;
75 using std::strtoul;
76 using std::strtol;
77 using std::system;
78 using std::wcstombs;
79 using std::wctomb;
80 #endif
81
82 #ifdef __cplusplus
83 extern "C" {
84 #endif
85
86 #ifndef _UID_T
87 #define _UID_T
88 typedef unsigned int    uid_t;          /* UID type */
89 #endif /* !_UID_T */
90
91 #if defined(__STDC__)
92 /* large file compilation environment setup */
93 #if !defined(_LP64) && _FILE_OFFSET_BITS == 64
94
95 #ifdef __PRAGMA_REDEFINE_EXTNAME
96 #pragma redefine_extname    mkstemp        mkstemp64
97 #pragma redefine_extname    mkstemps       mkstemps64
98 #else /* __PRAGMA_REDEFINE_EXTNAME */
99 #define mkstemp              mkstemp64
100 #define mkstemps             mkstemps64
101 #endif /* __PRAGMA_REDEFINE_EXTNAME */
102 #endif /* !_FILE_OFFSET_BITS == 64 */
103
104 /* In the LP64 compilation environment, all APIs are already large file */
105 #if defined(_LP64) && defined(_LARGEFILE64_SOURCE)
106
107 #ifdef __PRAGMA_REDEFINE_EXTNAME
108 #pragma redefine_extname    mkstemp64      mkstemp
109 #pragma redefine_extname    mkstemps64     mkstemps
110 #else /* __PRAGMA_REDEFINE_EXTNAME */
111 #define mkstemp64           mkstemp
112 #define mkstemps64         mkstemps
113 #endif /* __PRAGMA_REDEFINE_EXTNAME */
114
115 #endif /* !_LP64 && _LARGEFILE64_SOURCE */
116
117 #if defined(__EXTENSIONS__) || \
118     (!defined(_STRICT_STDC) && !defined(__XOPEN_OR_POSIX)) || \
119     (_POSIX_C_SOURCE - 0 >= 199506L) || defined(_REENTRANT)
120 extern int rand_r(unsigned int *);
121 #endif
122
123 extern void _exithandle(void);
124
125 #if defined(__EXTENSIONS__) || \
```

```

126     (!defined(_STRICT_STDC) && !defined(_POSIX_C_SOURCE)) || \
127     defined(_XPG4)
128 extern double drand48(void);
129 extern double erand48(unsigned short *);
130 extern long jrand48(unsigned short *);
131 extern void lcong48(unsigned short *);
132 extern long lrand48(void);
133 extern long mrand48(void);
134 extern long nrand48(unsigned short *);
135 extern unsigned short *seed48(unsigned short *);
136 extern void srand48(long);
137 extern int putenv(char *);
138 extern void setkey(const char *);
139 #endif /* defined(__EXTENSIONS__) || !defined(_STRICT_STDC) ... */

141 /*
142  * swab() has historically been in <stdlib.h> as delivered from AT&T
143  * and continues to be visible in the default compilation environment.
144  * As of Issue 4 of the X/Open Portability Guides, swab() was declared
145  * in <unistd.h>. As a result, with respect to X/Open namespace the
146  * swab() declaration in this header is only visible for the XPG3
147  * environment.
148  */
149 #if (defined(__EXTENSIONS__) || \
150     (!defined(_STRICT_STDC) && !defined(_POSIX_C_SOURCE))) && \
151     (!defined(_XOPEN_SOURCE) || (defined(_XPG3) && !defined(_XPG4)))
152 #ifndef _SSIZE_T
153 #define _SSIZE_T
154 #if defined(_LP64) || defined(_I32LPx)
155 typedef long    ssize_t;      /* size of something in bytes or -1 */
156 #else
157 typedef int     ssize_t;      /* (historical version) */
158 #endif
159 #endif /* !_SSIZE_T */

161 extern void swab(const char *, char *, ssize_t);
162 #endif /* defined(__EXTENSIONS__) || !defined(_STRICT_STDC) ... */

164 #if defined(__EXTENSIONS__) || \
165     (!defined(_XOPEN_OR_POSIX) || defined(_XPG4_2) || \
166     (defined(_LARGEFILE_SOURCE) && _FILE_OFFSET_BITS == 64))
167 extern int    mkstemp(char *);
168 #if !defined(_XPG4_2) || defined(__EXTENSIONS__)
169 extern int    mkstemps(char *, int);
170 #endif
171 #endif /* defined(__EXTENSIONS__) ... */

173 #if defined(_LARGEFILE64_SOURCE) && !((_FILE_OFFSET_BITS == 64) && \
174     !defined(__PRAGMA_REDEFINE_EXTNAME))
175 extern int    mkstemp64(char *);
176 #if !defined(_XPG4_2) || defined(__EXTENSIONS__)
177 extern int    mkstemps64(char *, int);
178 #endif
179 #endif /* _LARGEFILE64_SOURCE... */

181 /* Added in XPG4.2, obsoleted in Issue 6, removed in Issue 7 */
182 #if !defined(_STRICT_SYMBOLS) || (defined(_XPG4_2) && !defined(_XPG7))
183 extern char *ecvt(double, int, int * _RESTRICT_KYWD, int * _RESTRICT_KYWD);
184 extern char *fcvt(double, int, int * _RESTRICT_KYWD, int * _RESTRICT_KYWD);
185 extern char *gcvt(double, int, char *);
186 #endif

188 #if defined(__EXTENSIONS__) || \
189     (!defined(_STRICT_STDC) && !defined(_XOPEN_OR_POSIX)) || \
190     defined(_XPG4_2)
191 extern long a64l(const char *);

```

```

186 extern char *ecvt(double, int, int * _RESTRICT_KYWD, int * _RESTRICT_KYWD);
187 extern char *fcvt(double, int, int * _RESTRICT_KYWD, int * _RESTRICT_KYWD);
188 extern char *gcvt(double, int, char *);
192 extern int getsuopt(char **, char *const *, char **);
193 extern int grantpt(int);
194 extern char *initstate(unsigned, char *, size_t);
195 extern char *l64a(long);
196 extern char *mktemp(char *);
197 extern char *ptsname(int);
198 extern long random(void);
199 extern char *realpath(const char * _RESTRICT_KYWD, char * _RESTRICT_KYWD);
200 extern char *setstate(const char *);
201 extern void srandom(unsigned);
202 extern int unlockpt(int);
203 /* Marked LEGACY in SUSv2 and removed in SUSv3 */
204 #if !defined(_XPG6) || defined(__EXTENSIONS__)
205 extern int tty slot(void);
206 extern void *valloc(size_t);
207 #endif /* !defined(_XPG6) || defined(__EXTENSIONS__) */
208 #endif /* defined(__EXTENSIONS__) || ... || defined(_XPG4_2) */

210 #if defined(__EXTENSIONS__) || \
211     (!defined(_STRICT_STDC) && !defined(_XOPEN_OR_POSIX)) || \
212     defined(_XPG6)
213 extern int posix_memalign(void **, size_t, size_t);
214 extern int posix_openpt(int);
215 extern int setenv(const char *, const char *, int);
216 extern int unsetenv(const char *);
217 #endif

219 #if defined(__EXTENSIONS__) || \
220     (!defined(_STRICT_STDC) && !defined(_XOPEN_OR_POSIX))
221 extern char *canonicalize_file_name(const char *);
222 extern int clearenv(void);
223 extern void closefrom(int);
224 extern int daemon(int, int);
225 extern int dup2(int, int);
226 extern int dup3(int, int, int);
227 extern int fdwalk(int (*)(void *, int), void *);
228 extern char *qecvt(long double, int, int *, int *);
229 extern char *qfcvt(long double, int, int *, int *);
230 extern char *qgcvt(long double, int, char *);
231 extern char *getcwd(char *, size_t);
232 extern const char *getexename(void);

234 #ifndef __GETLOGIN_DEFINED /* Avoid duplicate in unistd.h */
235 #define __GETLOGIN_DEFINED
236 #ifndef __USE_LEGACY_LOGNAME
237 #ifdef __PRAGMA_REDEFINE_EXTNAME
238 #pragma redefine_extname getlogin getloginx
239 #else /* __PRAGMA_REDEFINE_EXTNAME */
240 extern char *getloginx(void);
241 #define getlogin    getloginx
242 #endif /* __PRAGMA_REDEFINE_EXTNAME */
243 #endif /* __USE_LEGACY_LOGNAME */
244 extern char *getlogin(void);
245 #endif /* __GETLOGIN_DEFINED */

247 extern int getopt(int, char *const *, const char *);
248 extern char *optarg;
249 extern int optind, opterr, optopt;
250 extern char *getpass(const char *);
251 extern char *getpassphrase(const char *);
252 extern int getpw(uid_t, char *);
253 extern int isatty(int);
254 extern void *memalign(size_t, size_t);

```

```

255 extern char *ttyname(int);
256 extern char *mkdtemp(char *);
257 extern const char *getprogname(void);
258 extern void setprogname(const char *);

260 #if !defined(_STRICT_STDC) && defined(_LONGLONG_TYPE)
261 extern char *lltostr(long long, char *);
262 extern char *ulltostr(unsigned long long, char *);
263 #endif /* !defined(_STRICT_STDC) && defined(_LONGLONG_TYPE) */

265 #endif /* defined(__EXTENSIONS__) || !defined(_STRICT_STDC) ... */

264 #else /* not __STDC__ */

266 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) || \
267     (_POSIX_C_SOURCE - 0 >= 199506L) || defined(_REENTRANT)
268 extern int rand_r();
269 #endif /* defined(__EXTENSIONS__) || defined(_REENTRANT) ... */

271 extern void _exithandle();

273 #if defined(__EXTENSIONS__) || !defined(_POSIX_C_SOURCE) || defined(_XPG4)
274 extern double drand48();
275 extern double erand48();
276 extern long jrand48();
277 extern void lcong48();
278 extern long lrand48();
279 extern long mrand48();
280 extern long nrand48();
281 extern unsigned short *seed48();
282 extern void srand48();
283 extern int putenv();
284 extern void setkey();
285 #endif /* defined(__EXTENSIONS__) || !defined(_POSIX_C_SOURCE) ... */

287 #if (defined(__EXTENSIONS__) || !defined(_POSIX_C_SOURCE)) && \
288     (!defined(_XOPEN_SOURCE) || (defined(_XPG3) && !defined(_XPG4)))
289 extern void swab();
290 #endif

292 #if defined(__EXTENSIONS__) || \
293     !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || \
294     (defined(_LARGEFILE_SOURCE) && _FILE_OFFSET_BITS == 64)
295 extern int mkstemp();
296 #if !defined(_XPG4_2) || defined(__EXTENSIONS__)
297 extern int mkstemps();
298 #endif
299 #endif /* defined(__EXTENSIONS__) ... */

301 #if defined(_LARGEFILE64_SOURCE) && !((_FILE_OFFSET_BITS == 64) && \
302     !defined(_PRAGMA_REDEFINE_EXTNAME))
303 extern int mkstemp64();
304 #if !defined(_XPG4_2) || defined(__EXTENSIONS__)
305 extern int mkstemps64();
306 #endif
307 #endif /* _LARGEFILE64_SOURCE... */

309 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)
310 extern long a64l();
311 extern char *ecvt();
312 extern char *fcvt();
313 extern char *gcvt();
314 extern int getsuopt();
315 extern int grantpt();
316 extern char *initstate();
317 extern char *l64a();

```

```

318 extern char *mktemp();
319 extern char *ptsname();
320 extern long random();
321 extern char *realpath();
322 extern char *setstate();
323 extern void srandom();
324 /* Marked LEGACY in SUSv2 and removed in SUSv3 */
325 #if !defined(_XPG6) || defined(__EXTENSIONS__)
326 extern int ttyslot();
327 extern void *valloc();
328 #endif /* !defined(_XPG6) || defined(__EXTENSIONS__) */
329 #endif /* defined(__EXTENSIONS__) || ... || defined(_XPG4_2) */

331 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) || defined(_XPG6)
332 extern int posix_memalign();
333 extern int posix_openpt();
334 extern int setenv();
335 extern int unsetenv();
336 #endif

338 #if defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX)
339 extern char *canonicalize_file_name();
340 extern int clearenv();
341 extern void closefrom();
342 extern int daemon();
343 extern int dup2();
344 extern int dup3();
345 extern int fdwalk();
346 extern char *gecvrt();
347 extern char *qfcvt();
348 extern char *ggcvrt();
349 extern char *getcwd();
350 extern char *getexecname();

352 #ifndef __GETLOGIN_DEFINED /* Avoid duplicate in unistd.h */
353 #define __GETLOGIN_DEFINED
354 #ifndef __USE_LEGACY_LOGNAME
355 #ifdef __PRAGMA_REDEFINE_EXTNAME
356 #pragma redefine_extname getlogin getloginx
357 #else /* __PRAGMA_REDEFINE_EXTNAME */
358 extern char *getloginx();
359 #define getlogin getloginx
360 #endif /* __PRAGMA_REDEFINE_EXTNAME */
361 #endif /* __USE_LEGACY_LOGNAME */
362 extern char *getlogin();
363 #endif /* __GETLOGIN_DEFINED */

365 extern int getopt();
366 extern char *optarg;
367 extern int optind, opterr, optopt;
368 extern char *getpass();
369 extern char *getpassphrase();
370 extern int getpw();
371 extern int isatty();
372 extern void *memalign();
373 extern char *ttyname();
374 extern char *mkdtemp();
375 extern char *getprogname();
376 extern void setprogname();

378 #if defined(_LONGLONG_TYPE)
379 extern char *lltostr();
380 extern char *ulltostr();
381 #endif /* defined(_LONGLONG_TYPE) */
382 #endif /* defined(__EXTENSIONS__) || !defined(__XOPEN_OR_POSIX) ... */

```

new/usr/src/head/stdlib.h

7

```
384 #endif /* __STDC__ */
```

```
267 #ifdef __cplusplus
```

```
268 }
```

```
_____unchanged_portion_omitted_
```

new/usr/src/head/strings.h

```
*****
2598 Sun Jul 27 18:01:21 2014
new/usr/src/head/strings.h
first round of POSIX 2008 stuff
*****
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, Version 1.0 only
6  * (the "License"). You may not use this file except in compliance
7  * with the License.
8  *
9  * You can obtain a copy of the license at usr/src/OPENSOLARIS.LICENSE
10 * or http://www.opensolaris.org/os/licensing.
11 * See the License for the specific language governing permissions
12 * and limitations under the License.
13 *
14 * When distributing Covered Code, include this CDDL HEADER in each
15 * file and include the License file at usr/src/OPENSOLARIS.LICENSE.
16 * If applicable, add the following below this CDDL HEADER, with the
17 * fields enclosed by brackets "[]" replaced with your own identifying
18 * information: Portions Copyright [yyyy] [name of copyright owner]
19 *
20 * CDDL HEADER END
21 */
22 /*
23  * Copyright (c) 1995, 1996, by Sun Microsystems, Inc.
24  * All rights reserved.
25  */
26 /*
27  * Copyright 2014 Garrett D'Amore <garrett@damore.org>
28  * Copyright 2013 Garrett D'Amore <garrett@damore.org>
29  */
30
31 #ifndef _STRINGS_H
32 #define _STRINGS_H
33
34 #include <sys/types.h>
35 #include <sys/feature_tests.h>
36
37 #if !defined(_XOPEN_SOURCE) || defined(__EXTENSIONS__)
38 #include <string.h>
39 #endif
40
41 #ifdef __cplusplus
42 extern "C" {
43 #endif
44
45 /* These symbols were replaced with mem* in XPG7 */
46 #if (!defined(_STRICT_SYMBOLS)) || (!defined(_XPG7))
47 #if defined(__STDC__)
48
49 extern int bcmp(const void *, const void *, size_t);
50 extern void bcopy(const void *, void *, size_t);
51 extern void bzero(void *, size_t);
52
53 extern char *index(const char *, int);
54 extern char *rindex(const char *, int);
55 #endif
56
57 /*
58  * X/Open System Interfaces and Headers, Issue 4, Version 2, defines
59  * both <string.h> and <strings.h>. The namespace requirements
60  * do not permit the visibility of anything other than what is
61  * specifically defined for each of these headers. As a result,
```

1

new/usr/src/head/strings.h

```
58  * inclusion of <string.h> would result in declarations not allowed
59  * in <strings.h>, and making the following prototypes visible for
60  * anything other than X/Open UNIX Extension would result in
61  * conflicts with what is now in <string.h>.
62  */
63 #if defined(_XPG4_2) && !defined(__EXTENSIONS__)
64 extern int ffs(int);
65 extern int strcasecmp(const char *, const char *);
66 extern int strncasecmp(const char *, const char *, size_t);
67 #if defined(_XPG7)
68 #ifndef _LOCALE_T
69 #define _LOCALE_T
70 typedef struct _locale *locale_t;
71 #endif
72 extern int strcasecmp_l(const char *, const char *, locale_t);
73 extern int strncasecmp_l(const char *, const char *, size_t, locale_t);
74 #endif /* defined(_XPG7) */
75 #endif /* defined(_XPG4_2) && !defined(__EXTENSIONS__) */
76
77 #else
78
79 extern int bcmp();
80 extern void bcopy();
81 extern void bzero();
82
83 extern char *index();
84 extern char *rindex();
85
86 #if defined(_XPG4_2) && !defined(__EXTENSIONS__)
87 extern int ffs();
88 extern int strcasecmp();
89 extern int strncasecmp();
90 #if defined(_XPG7)
91 extern int strcasecmp_l();
92 extern int strncasecmp_l();
93 #endif
94 #endif /* defined(_XPG4_2) && !defined(__EXTENSIONS__) */
95
96 #endif /* __STDC__ */
97
98 #ifdef __cplusplus
99 }
100 #endif
101
102 unchanged_portion_omitted
```

2

new/usr/src/head/ucontext.h

1

```
*****
2606 Sun Jul 27 18:01:21 2014
new/usr/src/head/ucontext.h
first round of POSIX 2008 stuff
*****

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 /*      Copyright (c) 1988 AT&T */
22 /*      All Rights Reserved      */

25 /*
26  * Copyright 2007 Sun Microsystems, Inc.  All rights reserved.
27  * Use is subject to license terms.
28 */
29 /*
30  * Copyright 2014 Garrett D'Amore <garrett@damore.org>
31 */

33 #ifndef _UCONTEXT_H
34 #define _UCONTEXT_H

36 #include <sys/ucontext.h>

38 #if !defined(_XPG4_2) || defined(__EXTENSIONS__)
39 #include <sys/siginfo.h>
40 #endif

42 #ifdef __cplusplus
43 extern "C" {
44 #endif

46 /*
47  * Arguably, under XPG7, applications should not even include this
48  * header, since it isn't part of Issue 7. We apply some paranoia for
49  * the functions that were explicitly removed, although we could likely
50  * just ignore the darn thing altogether.
51 */
52 #if (!defined(_STRICT_SYMBOLS)) || (defined(_XPG4_2) && !defined(_XPG7))

54 #ifdef __sparc
55 #ifdef __PRAGMA_REDEFINE_EXTNAME
56 #pragma redefine_extname      makecontext      __makecontext_v2
57 #else
58 #define makecontext      __makecontext_v2
59 #endif
60 #endif
```

new/usr/src/head/ucontext.h

2

```
51 #if defined(__STDC__)

62 extern int getcontext(ucontext_t *) __RETURNS_TWICE;
63 #pragma unknown_control_flow(getcontext)
64 extern int setcontext(const ucontext_t *) __NORETURN;
65 extern int swapcontext(ucontext_t *_RESTRICT_KYWD,
66                       const ucontext_t *_RESTRICT_KYWD);
67 extern void makecontext(ucontext_t *, void(*)(), int, ...);
68 #endif

70 #if !defined(_XPG4_2) || defined(__EXTENSIONS__)
71 extern int walkcontext(const ucontext_t *, int (*)(uintptr_t, int, void *),
72                       void *);
73 extern int printstack(int);
74 extern int addrtosymstr(void *, char *, int);
75 extern int getustack(stack_t **);
76 extern int setustack(stack_t *);

78 extern int stack_getbounds(stack_t *);
79 extern int stack_setbounds(const stack_t *);
80 extern int stack_inbounds(void *);
81 extern int stack_violation(int, const siginfo_t *, const ucontext_t *);

83 extern void *_stack_grow(void *);
84 #endif
74 #else

76 extern int getcontext() __RETURNS_TWICE;
77 #pragma unknown_control_flow(getcontext)
78 extern int setcontext();
79 extern int swapcontext();
80 extern void makecontext();
81 #if !defined(_XPG4_2) || defined(__EXTENSIONS__)
82 extern int walkcontext();
83 extern int printstack();
84 extern int addrtosymstr();
85 extern int getustack();
86 extern int setustack();

88 extern int stack_getbounds();
89 extern int stack_setbounds();
90 extern int stack_inbounds();
91 extern int stack_violation();

93 extern void *_stack_grow();
94 #endif
95 #endif

86 #ifdef __cplusplus
87 }
_____unchanged_portion_omitted_
```


new/usr/src/head/unistd.h

1

```
*****
22832 Sun Jul 27 18:01:22 2014
new/usr/src/head/unistd.h
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wcsasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
first round of POSIX 2008 stuff
*****
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 */

22 /*
23  * Copyright 2014 Garrett D'Amore <garrett@damore.org>
24  * Copyright (c) 2013 Gary Mills
25  *
26  * Copyright (c) 1989, 2010, Oracle and/or its affiliates. All rights reserved.
27  */

29 /*      Copyright (c) 1988 AT&T */
30 /*      All Rights Reserved      */

32 /* Copyright (c) 2013, OmniTI Computer Consulting, Inc. All rights reserved. */

34 #ifndef _UNISTD_H
35 #define _UNISTD_H

37 #include <sys/feature_tests.h>

39 #include <sys/types.h>
40 #include <sys/unistd.h>

42 #ifdef __cplusplus
43 extern "C" {
44 #endif

46 /* Symbolic constants for the "access" routine: */
47 #define R_OK    4      /* Test for Read permission */
48 #define W_OK    2      /* Test for Write permission */
49 #define X_OK    1      /* Test for eXecute permission */
50 #define F_OK    0      /* Test for existence of File */

52 #if defined(_XPG4_2) || !defined(_STRICT_SYMBOLS)
51 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
53 #define F_ULOCK 0      /* Unlock a previously locked region */
54 #define F_LOCK  1      /* Lock a region for exclusive use */
55 #define F_TLOCK 2      /* Test and lock a region for exclusive use */
56 #define F_TEST  3      /* Test a region for other processes locks */
57 #endif

```

new/usr/src/head/unistd.h

2

```
56 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */

59 /* Symbolic constants for the "lseek" routine: */

61 #ifndef SEEK_SET
62 #define SEEK_SET    0      /* Set file pointer to "offset" */
63 #endif

65 #ifndef SEEK_CUR
66 #define SEEK_CUR    1      /* Set file pointer to current plus "offset" */
67 #endif

69 #ifndef SEEK_END
70 #define SEEK_END    2      /* Set file pointer to EOF plus "offset" */
71 #endif

73 #if !defined(_STRICT_SYMBOLS)
72 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
74 #ifndef SEEK_DATA
75 #define SEEK_DATA    3      /* Set file pointer to next data past offset */
76 #endif

78 #ifndef SEEK_HOLE
79 #define SEEK_HOLE    4      /* Set file pointer to next hole past offset */
80 #endif
81 #endif /* !defined(_STRICT_SYMBOLS)
80 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */

83 #if !defined(_STRICT_SYMBOLS)
82 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
84 /* Path names: */
85 #define GF_PATH "/etc/group" /* Path name of the "group" file */
86 #define PF_PATH "/etc/passwd" /* Path name of the "passwd" file */
87 #endif
86 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */

89 /*
90  * compile-time symbolic constants,
91  * Support does not mean the feature is enabled.
92  * Use pathconf/sysconf to obtain actual configuration value.
93  */

95 /* Values unchanged in UNIX 03 */
96 #define _POSIX_ASYNC_IO          1
97 #define _POSIX_JOB_CONTROL       1
98 #define _POSIX_SAVED_IDS         1
99 #define _POSIX_SYNC_IO           1

101 /*
102  * POSIX.1b compile-time symbolic constants.
103  */
104 #if defined(_XPG6)
105 #define _POSIX_ASYNCHRONOUS_IO    200112L
106 #define _POSIX_FSYNC              200112L
107 #define _POSIX_MAPPED_FILES       200112L
108 #define _POSIX_MEMLOCK            200112L
109 #define _POSIX_MEMLOCK_RANGE      200112L
110 #define _POSIX_MEMORY_PROTECTION  200112L
111 #define _POSIX_MESSAGE_PASSING    200112L
112 #define _POSIX_PRIORITY_SCHEDULING 200112L
113 #define _POSIX_REALTIME_SIGNALS   200112L
114 #define _POSIX_SEMAPHORES         200112L
115 #define _POSIX_SHARED_MEMORY_OBJECTS 200112L
116 #define _POSIX_SYNCHRONIZED_IO    200112L
117 #else
118 #define _POSIX_ASYNCHRONOUS_IO    1

```

new/usr/src/head/unistd.h

3

```
119 #define _POSIX_FSYNC 1
120 #define _POSIX_MAPPED_FILES 1
121 #define _POSIX_MEMLOCK 1
122 #define _POSIX_MEMLOCK_RANGE 1
123 #define _POSIX_MEMORY_PROTECTION 1
124 #define _POSIX_MESSAGE_PASSING 1
125 #define _POSIX_PRIORITY_SCHEDULING 1
126 #define _POSIX_REALTIME_SIGNALS 1
127 #define _POSIX_SEMAPHORES 1
128 #define _POSIX_SHARED_MEMORY_OBJECTS 1
129 #define _POSIX_SYNCHRONIZED_IO 1
130 #endif

132 /*
133  * POSIX.1c compile-time symbolic constants.
134  */
135 #if defined(_XPG6)
136 #define _POSIX_THREAD_SAFE_FUNCTIONS 200112L
137 #define _POSIX_THREADS 200112L
138 #define _POSIX_THREAD_ATTR_STACKADDR 200112L
139 #define _POSIX_THREAD_ATTR_STACKSIZE 200112L
140 #define _POSIX_THREAD_PROCESS_SHARED 200112L
141 #define _POSIX_THREAD_PRIORITY_SCHEDULING 200112L
142 #define _POSIX_TIMERS 200112L
143 #else
144 #define _POSIX_THREAD_SAFE_FUNCTIONS 1
145 #define _POSIX_THREADS 1
146 #define _POSIX_THREAD_ATTR_STACKADDR 1
147 #define _POSIX_THREAD_ATTR_STACKSIZE 1
148 #define _POSIX_THREAD_PROCESS_SHARED 1
149 #define _POSIX_THREAD_PRIORITY_SCHEDULING 1
150 #define _POSIX_TIMERS 1
151 #endif

153 /* New in UNIX 03 */
154 #define _POSIX_ADVISORY_INFO 200112L
155 #define _POSIX_BARRIERS 200112L
156 #define _POSIX_CLOCK_SELECTION 200112L
157 #define _POSIX_IPV6 200112L
158 #define _POSIX_MONOTONIC_CLOCK 200112L
159 #define _POSIX_RAW_SOCKETS 200112L
160 #define _POSIX_READER_WRITER_LOCKS 200112L
161 #define _POSIX_SPAWN 200112L
162 #define _POSIX_SPIN_LOCKS 200112L
163 #define _POSIX_TIMEOUTS 200112L

165 /*
166  * Support for the POSIX.1 mutex protocol attribute. For realtime applications
167  * which need mutexes to support priority inheritance/ceiling.
168  */
169 #if defined(_XPG6)
170 #define _POSIX_THREAD_PRIO_INHERIT 200112L
171 #define _POSIX_THREAD_PRIO_PROTECT 200112L
172 #else
173 #define _POSIX_THREAD_PRIO_INHERIT 1
174 #define _POSIX_THREAD_PRIO_PROTECT 1
175 #endif

177 #ifndef _POSIX_VDISABLE
178 #define _POSIX_VDISABLE 0
179 #endif

181 #ifndef NULL
182 #if defined(_LP64)
183 #define NULL 0L
184 #else
```

new/usr/src/head/unistd.h

4

```
185 #define NULL 0
186 #endif
187 #endif

189 #define STDIN_FILENO 0
190 #define STDOUT_FILENO 1
191 #define STDERR_FILENO 2

193 /*
194  * Large File Summit-related announcement macros. The system supports both
195  * the additional and transitional Large File Summit interfaces. (The final
196  * two macros provide a finer granularity breakdown of _LFS64_LARGEFILE.)
197  */
198 #define _LFS_LARGEFILE 1
199 #define _LFS64_LARGEFILE 1
200 #define _LFS64_STDIO 1
201 #define _LFS64_ASYNCHRONOUS_IO 1

203 /* large file compilation environment setup */
204 #if !defined(_LP64) && _FILE_OFFSET_BITS == 64
205 #ifdef __PRAGMA_REDEFINE_EXTNAME
206 #pragma redefine_extname ftruncate ftruncate64
207 #pragma redefine_extname lseek lseek64
208 #pragma redefine_extname pread pread64
209 #pragma redefine_extname pwrite pwrite64
210 #pragma redefine_extname truncate truncate64
211 #pragma redefine_extname lockf lockf64
212 #pragma redefine_extname tell tell64
213 #else /* __PRAGMA_REDEFINE_EXTNAME */
214 #define ftruncate ftruncate64
215 #define lseek lseek64
216 #define pread pread64
217 #define pwrite pwrite64
218 #define truncate truncate64
219 #define lockf lockf64
220 #define tell tell64
221 #endif /* __PRAGMA_REDEFINE_EXTNAME */
222 #endif /* !_LP64 && _FILE_OFFSET_BITS == 64 */

224 /* In the LP64 compilation environment, the APIs are already large file */
225 #if defined(_LP64) && defined(_LARGEFILE64_SOURCE)
226 #ifdef __PRAGMA_REDEFINE_EXTNAME
227 #pragma redefine_extname ftruncate64 ftruncate
228 #pragma redefine_extname lseek64 lseek
229 #pragma redefine_extname pread64 pread
230 #pragma redefine_extname pwrite64 pwrite
231 #pragma redefine_extname truncate64 truncate
232 #pragma redefine_extname lockf64 lockf
233 #pragma redefine_extname tell64 tell
234 #else /* __PRAGMA_REDEFINE_EXTNAME */
235 #define ftruncate64 ftruncate
236 #define lseek64 lseek
237 #define pread64 pread
238 #define pwrite64 pwrite
239 #define truncate64 truncate
240 #define lockf64 lockf
241 #define tell64 tell
242 #endif /* __PRAGMA_REDEFINE_EXTNAME */
243 #endif /* _LP64 && _LARGEFILE64_SOURCE */

244 #if defined(__STDC__)

245 extern int access(const char *, int);
246 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
247 extern int acct(const char *);
248 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
```

```

249 extern unsigned alarm(unsigned);

251 /* Marked as LEGACY in SUSv2 and removed in SUSv3 */
252 #if (!defined(_STRICT_SYMBOLS)) || (defined(_XPG4_2) && !defined(_XPG6))
253 #if !defined(__XOPEN_OR_POSIX) || (defined(_XPG4_2) && !defined(_XPG6)) || \
254     defined(__EXTENSIONS__)
253 extern int brk(void *);
254 extern void *sbrk(intptr_t);
255 #endif

255 #endif /* !defined(__XOPEN_OR_POSIX) || (defined(_XPG4_2)... */
257 extern int chdir(const char *);
258 extern int chown(const char *, uid_t, gid_t);

260 /* Marked as LEGACY in SUSv2 and removed in SUSv3 */
261 #if (!defined(_STRICT_SYMBOLS)) || (defined(_XOPEN_SOURCE) && !defined(_XPG6))
259 #if !defined(_POSIX_C_SOURCE) || (defined(_XOPEN_SOURCE) && \
260     !defined(_XPG6)) || defined(__EXTENSIONS__)
262 extern int chroot(const char *);
263 #endif

262 #endif /* !defined(_POSIX_C_SOURCE) || defined(_XOPEN_SOURCE)... */
265 extern int close(int);

267 #if defined(_XPG4) || defined(__EXTENSIONS__)
268 extern size_t confstr(int, char *, size_t);
269 extern char *crypt(const char *, const char *);
270 extern void encrypt(char *, int);
271 #endif

267 #endif /* defined(_XPG4) || defined(__EXTENSIONS__) */
273 #if !defined(_POSIX_C_SOURCE) || defined(_XOPEN_SOURCE) || \
274     defined(__EXTENSIONS__)
275 extern char *ctermid(char *);
276 #endif

271 #endif /* (!defined(_POSIX_C_SOURCE) ... */
278 #if !defined(__XOPEN_OR_POSIX) || defined(_REENTRANT) || defined(__EXTENSIONS__)
279 extern char *ctermid_r(char *);
280 #endif

274 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_REENTRANT) ... */
282 /* Marked as LEGACY in SUSv2 and removed in SUSv3 */
283 #if !defined(_XPG6) || defined(__EXTENSIONS__)
284 extern char *cuserid(char *);
285 #endif

287 extern int dup(int);
288 extern int dup2(int, int);
289 extern int dup3(int, int, int);

282 #if defined(_XPG4) || defined(__EXTENSIONS__)
283 extern void encrypt(char *, int);
284 #endif /* defined(_XPG4) || defined(__EXTENSIONS__) */
285 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
286 extern void endusershell(void);
287 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
291 extern int execl(const char *, const char *, ...);
292 extern int execle(const char *, const char *, ...);
293 extern int execlp(const char *, const char *, ...);
294 extern int execv(const char *, char *const *);
295 extern int execve(const char *, char *const *, char *const *);
296 extern int execvp(const char *, char *const *);
297 extern void _exit(int);
298     _NORETURN;
299 /*

```

```

300 * The following fattach & fdetach prototypes are duplicated in <stropts.h>.
301 * The duplication is necessitated by XPG4.2 which requires the prototype
297 * The following fattach prototype is duplicated in <stropts.h>. The
298 * duplication is necessitated by XPG4.2 which requires the prototype
302 * be defined in <stropts.h>.
303 */
304 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
305 extern int fattach(int, const char *);
303 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
304 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
305 extern int fchdir(int);
306 extern int fchown(int, uid_t, gid_t);
307 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
308 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
306 extern int fchroot(int);
307 extern int fdetach(const char *);
308 #endif

310 #if !defined(_STRICT_SYMBOLS) || (_POSIX_C_SOURCE > 2)
310 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
311 #if !defined(__XOPEN_OR_POSIX) || (_POSIX_C_SOURCE > 2) || \
312     defined(__EXTENSIONS__)
311 extern int fdatsync(int);
312 extern int fsync(int);
313 #endif

314 #endif /* !defined(__XOPEN_OR_POSIX) || (_POSIX_C_SOURCE > 2)... */
315 /*
316 * The following fdetach prototype is duplicated in <stropts.h>. The
317 * duplication is necessitated by XPG4.2 which requires the prototype
318 * be defined in <stropts.h>.
319 */
320 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
321 extern int fdetach(const char *);
322 #endif /* !defined(__XOPEN_OR_POSIX)... */
315 extern pid_t fork(void);
324 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
325 extern pid_t fork1(void);
326 extern pid_t forkall(void);
327 #endif /* !defined(__XOPEN_OR_POSIX)... */
316 extern long fpathconf(int, int);

329 #if !defined(_POSIX_C_SOURCE) || (_POSIX_C_SOURCE > 2) || \
330     defined(__EXTENSIONS__)
331 extern int fsync(int);
332 #endif /* !defined(_POSIX_C_SOURCE) || (_POSIX_C_SOURCE > 2)... */
318 #if !defined(__XOPEN_OR_POSIX) || (_POSIX_C_SOURCE > 2) || defined(_XPG4_2) || \
319     (defined(_LARGEFILE_SOURCE) && _FILE_OFFSET_BITS == 64) || \
320     defined(__EXTENSIONS__)
321 extern int ftruncate(int, off_t);
322 #endif

337 #endif /* !defined(__XOPEN_OR_POSIX) || (_POSIX_C_SOURCE > 2)... */
324 extern char *getcwd(char *, size_t);
339 #if !defined(__XOPEN_OR_POSIX) || (defined(_XPG4_2) && !defined(_XPG6)) || \
340     defined(__EXTENSIONS__)
341 extern int getdtablesize(void);
342 #endif

325 extern gid_t getegid(void);
326 extern uid_t geteuid(void);
327 extern gid_t getgid(void);
328 extern int getgroups(int, gid_t *);

330 #if (!defined(_STRICT_SYMBOLS)) || defined(_XPG4_2)
331 extern int fchdir(int);
332 extern int fchown(int, uid_t, gid_t);

```

```

347 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
348 extern long gethostid(void);
349 #endif

350 #if defined(_XPG4_2)
351 extern int gethostname(char *, size_t);
352 #elif !defined(_STRICT_SYMBOLS)
353 #elif !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
354 extern int gethostname(char *, int);
355 #endif

356 #ifndef __GETLOGIN_DEFINED /* Avoid duplicate in stdlib.h */
357 #define __GETLOGIN_DEFINED
358 #ifndef __USE_LEGACY_LOGNAME
359 #ifdef __PRAGMA_REDEFINE_EXTNAME
360 #pragma redefine_extname getlogin getloginx
361 #else /* __PRAGMA_REDEFINE_EXTNAME */
362 extern char *getloginx(void);
363 #define getlogin getloginx
364 #endif /* __PRAGMA_REDEFINE_EXTNAME */
365 #endif /* __USE_LEGACY_LOGNAME */
366 extern char *getlogin(void);
367 #endif /* __GETLOGIN_DEFINED */

368 #if defined(_XPG4) || defined(__EXTENSIONS__)
369 extern int getopt(int, char *const *, const char *);
370 extern char *optarg;
371 extern int opterr, optind, optopt;
372 /* Marked as LEGACY in SUSv2 and removed in SUSv3 */
373 #if !defined(_XPG6) || defined(__EXTENSIONS__)
374 extern char *getpass(const char *);
375 #endif
376 #endif /* defined(_XPG4) || defined(__EXTENSIONS__) */

377 #if (!defined(_STRICT_SYMBOLS)) || (defined(_XPG4_2) && !defined(_XPG6))
378 extern int getdtablesize(void);
379 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
380 /* Marked as LEGACY in SUSv2 and removed in SUSv3 */
381 #if !defined(_XPG6) || defined(__EXTENSIONS__)
382 extern int getpagesize(void);
383 #endif

384 extern pid_t getpgid(pid_t);
385 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
386 extern pid_t getpid(void);
387 extern pid_t getppid(void);
388 extern pid_t getpgrp(void);

389 #if !defined(_STRICT_SYMBOLS) || defined(_XPG4_2)
390 extern pid_t getpgid(pid_t);
391 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
392 char *gettxt(const char *, const char *);
393 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
394 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
395 extern pid_t getsid(pid_t);
396 extern int lchown(const char *, uid_t, gid_t);
397 #endif

398 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
399 extern uid_t getuid(void);
400 extern int isatty(int);

401 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
402 extern char *getusershell(void);
403 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */

```

```

404 extern char *getwd(char *);
405 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
406 /*
407 * The following ioctl prototype is duplicated in <stropts.h>. The
408 * duplication is necessitated by XPG4.2 which requires the prototype
409 * be defined in <stropts.h>.
410 */
411 #if !defined(_STRICT_SYMBOLS)
412 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
413 extern int ioctl(int, int, ...);
414 extern int isaexec(const char *, char *const *, char *const *);
415 extern int issetugid(void);
416 #endif

417 extern int isatty(int);
418 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
419 extern int lchown(const char *, uid_t, gid_t);
420 #endif
421 extern int link(const char *, const char *);
422 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
423 extern offset_t llseek(int, offset_t, int);
424 #endif
425 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || \
426     (defined(_LARGEFILE_SOURCE) && _FILE_OFFSET_BITS == 64) || \
427     defined(__EXTENSIONS__)
428 extern int lockf(int, int, off_t);
429 #endif
430 extern off_t lseek(int, off_t, int);
431 #if !defined(_POSIX_C_SOURCE) || defined(_XOPEN_SOURCE) || \
432     defined(__EXTENSIONS__)
433 extern int nice(int);
434 #endif /* !defined(_POSIX_C_SOURCE) || defined(_XOPEN_SOURCE)... */
435 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
436 extern int mincore(caddr_t, size_t, char *);
437 #endif
438 extern long pathconf(const char *, int);
439 extern int pause(void);
440 extern int pipe(int *);
441 extern int pipe2(int *, int);
442 #if !defined(_POSIX_C_SOURCE) || defined(_XPG5) || \
443     (defined(_LARGEFILE_SOURCE) && _FILE_OFFSET_BITS == 64) || \
444     defined(__EXTENSIONS__)
445 extern ssize_t pread(int, void *, size_t, off_t);
446 #endif
447 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
448 extern void profil(unsigned short *, size_t, unsigned long, unsigned int);
449 #endif
450 /*
451 * pthread_atfork() is also declared in <pthread.h> as per SUSv3. The
452 * declarations are identical. A change to either one may also require
453 * appropriate namespace updates in order to avoid redeclaration
454 * warnings in the case where both prototypes are exposed via inclusion
455 * of both <pthread.h> and <unistd.h>.
456 */
457 #if !defined(__XOPEN_OR_POSIX) || \
458     ((__POSIX_C_SOURCE > 2) && !defined(_XPG6)) || \
459     defined(__EXTENSIONS__)
460 extern int pthread_atfork(void (*) (void), void (*) (void), void (*) (void));
461 #endif /* !defined(__XOPEN_OR_POSIX) || ((__POSIX_C_SOURCE > 2) ... */
462 #if !defined(_LP64) && \
463     (!defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__))
464 extern int ptrace(int, pid_t, int, int);
465 #endif
466 #if !defined(_POSIX_C_SOURCE) || defined(_XPG5) || \
467     (defined(_LARGEFILE_SOURCE) && _FILE_OFFSET_BITS == 64) || \

```

```

443     defined(__EXTENSIONS__)
444 extern ssize_t pwrite(int, const void *, size_t, off_t);
445 #endif
446 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
447 /* per RFC 3542; This is also defined in netdb.h */
448 extern int rcmd_af(char **, unsigned short, const char *, const char *,
449     const char *, int *, int);
450 #endif
451 extern ssize_t read(int, void *, size_t);
452 #if !defined(__XOPEN_OR_POSIX) || \
453     defined(_XPG4_2) || defined(__EXTENSIONS__)
454 extern ssize_t readlink(const char *_RESTRICT_KYWD, char *_RESTRICT_KYWD,
455     size_t);
456 #endif
457 #if (!defined(__XOPEN_OR_POSIX) || (defined(_XPG3) && !defined(_XPG4))) || \
458     defined(__EXTENSIONS__)
459 #if __cplusplus >= 199711L
460 namespace std {
461 #endif
462 extern int rename(const char *, const char *);
463 #if __cplusplus >= 199711L
464 } /* end of namespace std */
465
466 using std::rename;
467 #endif /* __cplusplus >= 199711L */
468 #endif /* (!defined(__XOPEN_OR_POSIX) || (defined(_XPG3)... */
469 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
470 extern int resolvepath(const char *, char *, size_t);
471 /* per RFC 3542; This is also defined in netdb.h */
472 extern int rexec_af(char **, unsigned short, const char *, const char *,
473     const char *, int *, int);
474 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
475 extern int rmdir(const char *);
476 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
477 /* per RFC 3542; This is also defined in netdb.h */
478 extern int rresvport_af(int *, int);
479 #endif
480
481 #if !defined(__XOPEN_OR_POSIX) || (defined(_XPG4_2) && !defined(_XPG6)) || \
482     defined(__EXTENSIONS__)
483 extern void *sbrk(intptr_t);
484 #endif /* !defined(__XOPEN_OR_POSIX) || (defined(_XPG4_2)... */
485 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG6) || defined(__EXTENSIONS__)
486 extern int setegid(gid_t);
487 extern int seteuid(uid_t);
488 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG6) ... */
489 extern int setgid(gid_t);
490 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
491 extern int setregid(gid_t, gid_t);
492 extern int setreuid(uid_t, uid_t);
493 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
494 extern pid_t setsid(void);
495 extern int setuid(uid_t);
496 extern unsigned sleep(unsigned);
497
498 #if !defined(_STRICT_SYMBOLS)
499 extern char *gettxt(const char *, const char *);
500 extern void endusershell(void);
501 extern pid_t fork1(void);
502 extern pid_t forkall(void);

```

```

505 extern char *getusershell(void);
506 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
507 extern void setusershell(void);
508 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
509 extern unsigned sleep(unsigned);
510 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
511 extern int stime(const time_t *);
512 #endif
513
514 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
515 #if defined(_XPG4)
516 /* __EXTENSIONS__ makes the SVID Third Edition prototype in stdlib.h visible */
517 extern void swab(const void *_RESTRICT_KYWD, void *_RESTRICT_KYWD, ssize_t);
518 #endif /* defined(_XPG4) */
519
520 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
521 extern int symlink(const char *, const char *);
522 extern void sync(void);
523 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) */
524 #if defined(_XPG5) && !defined(_XPG6)
525 #ifdef __PRAGMA_REDEFINE_EXTNAME
526 #pragma redefine_extname sysconf __sysconf_xpg5
527 #else /* __PRAGMA_REDEFINE_EXTNAME */
528 #define sysconf __sysconf_xpg5
529 #endif /* __PRAGMA_REDEFINE_EXTNAME */
530 #endif /* defined(_XPG5) && !defined(_XPG6) */
531
532 extern long sysconf(int);
533 extern pid_t tcgetpgrp(int);
534 extern int tcsetpgrp(int, pid_t);
535 #if !defined(__XOPEN_OR_POSIX) || \
536     (defined(_LARGEFILE_SOURCE) && _FILE_OFFSET_BITS == 64) || \
537     defined(__EXTENSIONS__)
538 extern off_t tell(int);
539 #endif
540
541 #endif /* !defined(__XOPEN_OR_POSIX)... */
542 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || \
543     (defined(_LARGEFILE_SOURCE) && _FILE_OFFSET_BITS == 64) || \
544     defined(__EXTENSIONS__)
545 extern int truncate(const char *, off_t);
546 #endif
547
548 extern long sysconf(int);
549 extern pid_t tcgetpgrp(int);
550 extern int tcsetpgrp(int, pid_t);
551 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
552 extern char *ttyname(int);
553 extern int unlink(const char *);
554 extern ssize_t write(int, const void *, size_t);
555
556 #if (defined(_XPG4_2) && !defined(_XPG7)) || !defined(_STRICT_SYMBOLS)
557 extern char *getwd(char *);
558 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
559 extern useconds_t ualarm(useconds_t, useconds_t);
560 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
561 extern int unlink(const char *);
562 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
563 extern int usleep(useconds_t);
564 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
565 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
566 extern pid_t vfork(void) _RETURNS_TWICE;
567 #pragma unknown_control_flow(vfork)
568 #endif
569 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
570 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)

```

```

569 extern void vhangup(void);
570 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
571 extern ssize_t write(int, const void *, size_t);
572 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
573 extern void yield(void);
574 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */

554 #if defined(_XPG7) || defined(_ATFILE_SOURCE) || !defined(_STRICT_SYMBOLS)
576 #if !defined(__XOPEN_OR_POSIX) || defined(_ATFILE_SOURCE) || \
577     defined(__EXTENSIONS__)
578     /* || defined(_XPG7) */
555 extern int faccessat(int, const char *, int, int);
556 extern int fchownat(int, const char *, uid_t, gid_t, int);
557 extern int linkat(int, const char *, int, const char *, int);
558 extern ssize_t readlinkat(int, const char *_RESTRICT_KYWD,
559     char *_RESTRICT_KYWD, size_t);
560 extern int renameat(int, const char *, int, const char *);
561 extern int symlinkat(const char *, int, const char *);
562 extern int unlinkat(int, const char *, int);
563 #endif

565 #if !defined(_STRICT_SYMBOLS)
587 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_ATFILE_SOURCE)... */
588 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
566 extern int get_nprocs(void);
567 extern int get_nprocs_conf(void);
568 extern void vhangup(void);
569 extern void yield(void);
570 #endif
591 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */

572 /* transitional large file interface versions */
573 #if defined(_LARGEFILE64_SOURCE) && !((_FILE_OFFSET_BITS == 64) && \
574     !defined(_PRAGMA_REDEFINE_EXTNAME))
575 extern int ftruncate64(int, off64_t);
576 extern off64_t lseek64(int, off64_t, int);
577 extern ssize_t pread64(int, void *, size_t, off64_t);
578 extern ssize_t pwrite64(int, const void *, size_t, off64_t);
579 extern off64_t tell64(int);
580 extern int truncate64(const char *, off64_t);
581 extern int lockf64(int, int, off64_t);
582 #endif /* _LARGEFILE64_SOURCE */

605 #else /* __STDC__ */

607 extern int access();
608 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
609 extern int acct();
610 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
611 extern unsigned alarm();
612 #if !defined(__XOPEN_OR_POSIX) || (defined(_XPG4_2) && !defined(_XPG6)) || \
613     defined(__EXTENSIONS__)
614 extern int brk();
615 #endif /* !defined(__XOPEN_OR_POSIX) || (defined(_XPG4_2)... */
616 extern int chdir();
617 extern int chown();
618 #if !defined(_POSIX_C_SOURCE) || defined(_XOPEN_SOURCE) || \
619     defined(__EXTENSIONS__)
620 extern int chroot();
621 #endif /* (!defined(_POSIX_C_SOURCE) || defined(_XOPEN_SOURCE)... */
622 extern int close();
623 #if defined(_XPG4) || defined(__EXTENSIONS__)
624 extern size_t confstr();
625 extern char *crypt();
626 #endif /* defined(_XPG4) || defined(__EXTENSIONS__) */
627 #if !defined(_POSIX_C_SOURCE) || defined(_XPG3) || defined(__EXTENSIONS__)

```

```

628 extern char *ctermid();
629 #endif /* (!defined(_POSIX_C_SOURCE) || defined(_XPG3)... */
630 #if !defined(__XOPEN_OR_POSIX) || defined(_REENTRANT) || defined(__EXTENSIONS__)
631 extern char *ctermid_r();
632 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_REENTRANT) ... */
633 #if !defined(_XPG6) || defined(__EXTENSIONS__)
634 extern char *cuserid();
635 #endif
636 extern int dup();
637 extern int dup2();
638 extern int dup3();
639 #if defined(_XPG4) || defined(__EXTENSIONS__)
640 extern void encrypt();
641 #endif /* defined(_XPG4) || defined(__EXTENSIONS__) */
642 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
643 extern void endusershell();
644 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
645 extern int execl();
646 extern int execle();
647 extern int execlp();
648 extern int execv();
649 extern int execve();
650 extern int execvp();
651 extern void _exit();
652 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
653 extern int fattach();
654 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
655 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
656 extern int fchdir();
657 extern int fchown();
658 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
659 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
660 extern int fchroot();
661 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
662 #if !defined(__XOPEN_OR_POSIX) || (_POSIX_C_SOURCE > 2) || \
663     defined(__EXTENSIONS__)
664 extern int fdasyncl();
665 #endif /* !defined(__XOPEN_OR_POSIX) || (_POSIX_C_SOURCE > 2)... */
666 #if !defined(__XOPEN_OR_POSIX)
667 extern int fdetach();
668 #endif /* !defined(__XOPEN_OR_POSIX) */
669 extern pid_t fork();
670 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
671 extern pid_t fork1();
672 extern pid_t forkall();
673 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
674 extern long fpathconf();
675 #if !defined(_POSIX_C_SOURCE) || (_POSIX_C_SOURCE > 2) || \
676     defined(__EXTENSIONS__)
677 extern int fsync();
678 #endif /* !defined(_POSIX_C_SOURCE) || (_POSIX_C_SOURCE > 2)... */
679 #if !defined(__XOPEN_OR_POSIX) || (_POSIX_C_SOURCE > 2) || defined(_XPG4_2) || \
680     (defined(_LARGEFILE_SOURCE) && _FILE_OFFSET_BITS == 64) || \
681     defined(__EXTENSIONS__)
682 extern int ftruncate();
683 #endif /* !defined(__XOPEN_OR_POSIX) || (_POSIX_C_SOURCE > 2)... */
684 extern char *getcwd();
685 #if !defined(__XOPEN_OR_POSIX) || (defined(_XPG4_2) && !defined(_XPG6)) || \
686     defined(__EXTENSIONS__)
687 extern int getdtablesize();
688 #endif
689 extern gid_t getegid();
690 extern uid_t geteuid();
691 extern gid_t getgid();
692 extern int getgroups();
693 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)

```

```

694 extern long gethostid();
695 #endif
696 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
697 extern int gethostname();
698 #endif

700 #ifndef __GETLOGIN_DEFINED /* Avoid duplicate in stdlib.h */
701 #define __GETLOGIN_DEFINED
702 #ifndef __USE_LEGACY_LOGNAME__
703 #ifdef __PRAGMA_REDEFINE_EXTNAME
704 #pragma redefine_extname getlogin getloginx
705 #else /* __PRAGMA_REDEFINE_EXTNAME */
706 extern char *getloginx();
707 #define getlogin getloginx
708 #endif /* __PRAGMA_REDEFINE_EXTNAME */
709 #endif /* __USE_LEGACY_LOGNAME__ */
710 extern char *getlogin();
711 #endif /* __GETLOGIN_DEFINED */

713 #if defined(_XPG4) || defined(__EXTENSIONS__)
714 extern int getopt();
715 extern char *optarg;
716 extern int opterr, optind, optopt;
717 #if !defined(_XPG6) || defined(__EXTENSIONS__)
718 extern char *getpass();
719 #endif
720 #endif /* defined(_XPG4) || defined(__EXTENSIONS__) */
721 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
722 #if !defined(_XPG6) || defined(__EXTENSIONS__)
723 extern int getpagesize();
724 #endif
725 extern pid_t getpgid();
726 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
727 extern pid_t getpid();
728 extern pid_t getppid();
729 extern pid_t getpgrp();
730 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
731 char *gettxt();
732 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
733 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
734 extern pid_t getsid();
735 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) */
736 extern uid_t getuid();
737 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
738 extern char *getusershell();
739 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
740 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
741 extern char *getwd();
742 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
743 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
744 extern int ioctl();
745 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
746 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
747 extern int isaexec();
748 extern int issetugid();
749 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
750 extern int isatty();
751 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
752 extern int lchown();
753 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) */
754 extern int link();
755 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
756 extern off_t llseek();
757 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
758 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || \
759     (defined(_LARGEFILE_SOURCE) && _FILE_OFFSET_BITS == 64) || \

```

```

760     defined(__EXTENSIONS__)
761 extern int lockf();
762 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
763 extern off_t lseek();
764 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
765 extern int mincore();
766 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
767 #if !defined(_POSIX_C_SOURCE) || defined(_XOPEN_SOURCE) || \
768     defined(__EXTENSIONS__)
769 extern int nice();
770 #endif /* !defined(_POSIX_C_SOURCE) || defined(_XOPEN_SOURCE)... */
771 extern long pathconf();
772 extern int pause();
773 extern int pipe();
774 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG5) || \
775     (defined(_LARGEFILE_SOURCE) && _FILE_OFFSET_BITS == 64) || \
776     defined(__EXTENSIONS__)
777 extern ssize_t pread();
778 #endif
779 #if !defined(_LP64) && \
780     (!defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__))
781 extern void profil();
782 extern int ptrace();
783 #endif
784 #if !defined(__XOPEN_OR_POSIX) || \
785     ((defined(_POSIX_C_SOURCE > 2) && !defined(_XPG6)) || \
786     defined(__EXTENSIONS__))
787 extern int pthread_atfork();
788 #endif /* !defined(__XOPEN_OR_POSIX) || ((defined(_POSIX_C_SOURCE > 2) ... */
789 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG5) || \
790     (defined(_LARGEFILE_SOURCE) && _FILE_OFFSET_BITS == 64) || \
791     defined(__EXTENSIONS__))
792 extern ssize_t pwrite();
793 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG5) */
794 extern ssize_t read();
795 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
796 /* per RFC 3542; This is also defined in netdb.h */
797 extern int rcmd_af();
798 #endif
799 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
800 extern ssize_t readlink();
801 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
802 #if (!defined(__XOPEN_OR_POSIX) || (defined(_XPG3) && !defined(_XPG4))) || \
803     defined(__EXTENSIONS__)
804 extern int rename();
805 #endif /* (!defined(__XOPEN_OR_POSIX) || (defined(_XPG3)... */
806 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
807 extern int resolvepath();
808 /* per RFC 3542; This is also defined in netdb.h */
809 extern int rexec_af();
810 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
811 extern int rmdir();
812 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
813 /* per RFC 3542; This is also defined in netdb.h */
814 extern int rresvport_af();
815 #endif
816 #if !defined(__XOPEN_OR_POSIX) || (defined(_XPG4_2) && !defined(_XPG6)) || \
817     defined(__EXTENSIONS__)
818 extern void *sbrk();
819 #endif /* !defined(__XOPEN_OR_POSIX) || (defined(_XPG4_2)... */
820 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG6) || defined(__EXTENSIONS__)
821 extern int setegid();
822 extern int seteuid();
823 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG6) ... */
824 extern int setgid();
825 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)

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```

826 extern int setgroups();
827 extern int sethostname();
828 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
829 extern int setpgid();
830 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
831 extern pid_t setpgpr();
832 extern int setregid();
833 extern int setreuid();
834 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
835 extern pid_t setsid();
836 extern int setuid();
837 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
838 extern void setusershell();
839 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
840 extern unsigned sleep();
841 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
842 extern int stime();
843 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
844 #if defined(_XPG4)
845 /* __EXTENSIONS__ makes the SVID Third Edition prototype in stdlib.h visible */
846 extern void swab();
847 #endif /* defined(_XPG4) */
848 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
849 extern int symlink();
850 extern void sync();
851 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
852 #if defined(_XPG5)
853 #ifdef __PRAGMA_REDEFINE_EXTNAME
854 #pragma redefine_extname sysconf __sysconf_xpg5
855 extern long sysconf();
856 #else /* __PRAGMA_REDEFINE_EXTNAME */
857 extern long __sysconf_xpg5();
858 #define sysconf __sysconf_xpg5
859 #endif /* __PRAGMA_REDEFINE_EXTNAME */
860 #endif /* defined(_XPG5) */
861 extern pid_t tcgetpgrp();
862 extern int tcsetpgrp();
863 #if !defined(__XOPEN_OR_POSIX) || \
864     (defined(_LARGEFILE_SOURCE) && _FILE_OFFSET_BITS == 64) || \
865     defined(__EXTENSIONS__)
866 extern off_t tell();
867 #endif /* !defined(__XOPEN_OR_POSIX)... */
868 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || \
869     (defined(_LARGEFILE_SOURCE) && _FILE_OFFSET_BITS == 64) || \
870     defined(__EXTENSIONS__)
871 extern int truncate();
872 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
873 extern char *ttyname();
874 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
875 extern useconds_t ualarm();
876 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
877 extern int unlink();
878 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
879 extern int usleep();
880 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
881 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
882 extern pid_t vfork();
883 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */
884 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
885 extern void vhangup();
886 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
887 extern ssize_t write();
888 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
889 extern void yield();
890 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */

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```

892 #if !defined(__XOPEN_OR_POSIX) || defined(_ATFILE_SOURCE) || \
893     defined(__EXTENSIONS__)
894 /* || defined(_XPG7) */
895 extern int faccessat();
896 extern int fchownat();
897 extern int linkat();
898 extern ssize_t readlinkat();
899 extern int renameat();
900 extern int symlinkat();
901 extern int unlinkat();
902 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_ATFILE_SOURCE)... */
903 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
904 extern int get_nprocs();
905 extern int get_nprocs_conf();
906 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */

908 /* transitional large file interface versions */
909 #if defined(_LARGEFILE64_SOURCE) && !((_FILE_OFFSET_BITS == 64) && \
910     !defined(__PRAGMA_REDEFINE_EXTNAME))
911 extern int ftruncate64();
912 extern off64_t lseek64();
913 extern ssize_t pread64();
914 extern ssize_t pwrite64();
915 extern off64_t tell64();
916 extern int truncate64();
917 extern int lockf64();
918 #endif /* _LARGEFILE64_SOURCE */

920 #endif /* _STDC */

922 #if !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2) || defined(__EXTENSIONS__)
923 #pragma unknown_control_flow(vfork)
924 #endif /* !defined(__XOPEN_OR_POSIX) || defined(_XPG4_2)... */

584 /*
585  * getlogin_r() & ttyname_r() prototypes are defined here.
586  */

588 /*
589  * Previous releases of Solaris, starting at 2.3, provided definitions of
590  * various functions as specified in POSIX.1c, Draft 6. For some of these
591  * functions, the final POSIX 1003.1c standard had a different number of
592  * arguments and return values.
593  *
594  * The following segment of this header provides support for the standard
595  * interfaces while supporting applications written under earlier
596  * releases. The application defines appropriate values of the feature
597  * test macros _POSIX_C_SOURCE and _POSIX_PTHREAD_SEMANTICS to indicate
598  * whether it was written to expect the Draft 6 or standard versions of
599  * these interfaces, before including this header. This header then
600  * provides a mapping from the source version of the interface to an
601  * appropriate binary interface. Such mappings permit an application
602  * to be built from libraries and objects which have mixed expectations
603  * of the definitions of these functions.
604  *
605  * For applications using the Draft 6 definitions, the binary symbol is the
606  * same as the source symbol, and no explicit mapping is needed. For the
607  * standard interface, the function func() is mapped to the binary symbol
608  * _posix_func(). The preferred mechanism for the remapping is a compiler
609  * #pragma. If the compiler does not provide such a #pragma, the header file
610  * defines a static function func() which calls the _posix_func() version;
611  * this has to be done instead of #define since POSIX specifies that an
612  * application can #undef the symbol and still be bound to the correct
613  * implementation. Unfortunately, the statics confuse lint so we fallback to
614  * #define in that case.
615  */

```



```

616 * NOTE: Support for the Draft 6 definitions is provided for compatibility
617 * only. New applications/libraries should use the standard definitions.
618 */

620 #if defined(__EXTENSIONS__) || defined(_REENTRANT) || \
621 !defined(__XOPEN_OR_POSIX) || (_POSIX_C_SOURCE - 0 >= 199506L) || \
622 defined(_POSIX_PTHREAD_SEMANTICS)

966 #if defined(__STDC__)

624 #if (_POSIX_C_SOURCE - 0 >= 199506L) || defined(_POSIX_PTHREAD_SEMANTICS)

626 #ifndef __USE_LEGACY_LOGNAME__
627 #ifdef __PRAGMA_REDEFINE_EXTNAME
628 #pragma redefine_extname getlogin_r __posix_getloginx_r
629 extern int getlogin_r(char *, int);
630 #else /* __PRAGMA_REDEFINE_EXTNAME */
631 extern int __posix_getloginx_r(char *, int);
632 #define getlogin_r __posix_getloginx_r
633 #endif /* __PRAGMA_REDEFINE_EXTNAME */
634 #else /* __USE_LEGACY_LOGNAME__ */
635 #ifdef __PRAGMA_REDEFINE_EXTNAME
636 #pragma redefine_extname getlogin_r __posix_getlogin_r
637 extern int getlogin_r(char *, int);
638 #else /* __PRAGMA_REDEFINE_EXTNAME */
639 extern int __posix_getlogin_r(char *, int);

641 #ifdef __lint

643 #define getlogin_r __posix_getlogin_r

645 #else /* !__lint */

647 static int
648 getlogin_r(char *__name, int __len)
649 {
650     return (__posix_getlogin_r(__name, __len));
651 }
__unchanged_portion_omitted__

675 #endif /* !__lint */
676 #endif /* __PRAGMA_REDEFINE_EXTNAME */

678 #else /* (_POSIX_C_SOURCE - 0 >= 199506L) || ... */

680 #ifndef __USE_LEGACY_LOGNAME__
681 #ifdef __PRAGMA_REDEFINE_EXTNAME
682 #pragma redefine_extname getlogin_r getloginx_r
683 #else /* __PRAGMA_REDEFINE_EXTNAME */
684 extern char *getloginx_r(char *, int);
685 #define getlogin_r getloginx_r
686 #endif /* __PRAGMA_REDEFINE_EXTNAME */
687 #endif /* __USE_LEGACY_LOGNAME__ */
688 extern char *getlogin_r(char *, int);

690 extern char *ttyname_r(int, char *, int);

692 #endif /* (_POSIX_C_SOURCE - 0 >= 199506L) || ... */

1038 #else /* __STDC__ */

1040 #if (_POSIX_C_SOURCE - 0 >= 199506L) || defined(_POSIX_PTHREAD_SEMANTICS)

1042 #ifndef __USE_LEGACY_LOGNAME__
1043 #ifdef __PRAGMA_REDEFINE_EXTNAME
1044 #pragma redefine_extname getlogin_r __posix_getloginx_r

```

```

1045 extern int getlogin_r();
1046 #else /* __PRAGMA_REDEFINE_EXTNAME */
1047 extern int __posix_getloginx_r();
1048 #define getlogin_r __posix_getloginx_r
1049 #endif /* __PRAGMA_REDEFINE_EXTNAME */
1050 #else /* __USE_LEGACY_LOGNAME__ */
1051 #ifdef __PRAGMA_REDEFINE_EXTNAME
1052 #pragma redefine_extname getlogin_r __posix_getlogin_r
1053 extern int getlogin_r();
1054 #else /* __PRAGMA_REDEFINE_EXTNAME */
1055 extern int __posix_getlogin_r();

1057 #ifdef __lint

1059 #define getlogin_r __posix_getlogin_r

1061 #else /* !__lint */

1063 static int
1064 getlogin_r(__name, __len)
1065     char *__name;
1066     int __len;
1067 {
1068     return (__posix_getlogin_r(__name, __len));
1069 }
1070 #endif /* !__lint */
1071 #endif /* __PRAGMA_REDEFINE_EXTNAME */
1072 #endif /* __USE_LEGACY_LOGNAME__ */

1074 #ifdef __PRAGMA_REDEFINE_EXTNAME
1075 #pragma redefine_extname ttyname_r __posix_ttyname_r
1076 extern int ttyname_r();
1077 #else /* __PRAGMA_REDEFINE_EXTNAME */

1079 extern int __posix_ttyname_r();

1081 #ifdef __lint

1083 #define ttyname_r __posix_ttyname_r

1085 #else /* !__lint */

1087 ttyname_r(__fildev, __buf, __size)
1088     int __fildev;
1089     char *__buf;
1090     size_t __size;
1091 {
1092     return (__posix_ttyname_r(__fildev, __buf, __size));
1093 }
1094 #endif /* !__lint */
1095 #endif /* __PRAGMA_REDEFINE_EXTNAME */

1097 #else /* (_POSIX_C_SOURCE - 0 >= 199506L) || ... */

1099 #ifndef __USE_LEGACY_LOGNAME__
1100 #ifdef __PRAGMA_REDEFINE_EXTNAME
1101 #pragma redefine_extname getlogin_r getloginx_r
1102 #else /* __PRAGMA_REDEFINE_EXTNAME */
1103 extern char *getloginx_r();
1104 #define getlogin_r getloginx_r
1105 #endif /* __PRAGMA_REDEFINE_EXTNAME */
1106 #endif /* __USE_LEGACY_LOGNAME__ */
1107 extern char *getlogin_r();

1109 extern char *ttyname_r();

```

new/usr/src/head/unistd.h

19

```
1111 #endif /* (_POSIX_C_SOURCE - 0 >= 199506L) || ... */
1113 #endif /* __STDC__ */

694 #endif /* defined(__EXTENSIONS__) || defined(_REENTRANT)... */

696 #ifdef __cplusplus
697 }
_____unchanged_portion_omitted_
```

new/usr/src/head/wchar.h

1

```
*****
5440 Sun Jul 27 18:01:22 2014
new/usr/src/head/wchar.h
Finished obsoleting interfaces for XPG7.
*****
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 Garrett D'Amore <garrett@damore.org>
24  * Copyright (c) 1993, 2010, Oracle and/or its affiliates. All rights reserved.
25  */
26
27 #ifndef _WCHAR_H
28 #define _WCHAR_H
29
30 #include <sys/feature_tests.h>
31 #include <iso/wchar_iso.h>
32 #include <iso/wchar_c99.h>
33
34 /*
35  * Allow global visibility for symbols defined in
36  * C++ "std" namespace in <iso/wchar_iso.h>.
37  */
38 #if __cplusplus >= 199711L
39 using std::FILE;
40 using std::wint_t;
41 using std::clock_t;
42 using std::size_t;
43 using std::time_t;
44 using std::tm;
45 using std::mbstate_t;
46 using std::fgetwc;
47 using std::fgetws;
48 using std::fputwc;
49 using std::fputws;
50 using std::ungetwc;
51 using std::getwc;
52 using std::getwchar;
53 using std::putwc;
54 using std::putwchar;
55 using std::wcstod;
56 using std::wcstol;
57 using std::wcstoul;
58 using std::wcscat;
59 using std::wcschr;
60 using std::wcscmp;
61 using std::wcscoll;
```

new/usr/src/head/wchar.h

2

```
62 using std::wcsncpy;
63 using std::wcsncpy;
64 using std::wcslen;
65 using std::wcsncat;
66 using std::wcsncmp;
67 using std::wcsncpy;
68 using std::wcpbrk;
69 using std::wcsrchr;
70 using std::wcssp;
71 using std::wcxfrm;
72 using std::wcstok;
73 using std::wcsftime;
74 /* not XPG4 and not XPG4v2 */
75 #if (!defined(_XPG4) && !defined(_XPG4_2) || defined(_XPG5))
76 using std::btowc;
77 using std::fwprintf;
78 using std::fwscanf;
79 using std::fwide;
80 using std::mbsinit;
81 using std::mbrlen;
82 using std::mbrtowc;
83 using std::mbsrtowcs;
84 using std::swprintf;
85 using std::swscanf;
86 using std::vfwprintf;
87 using std::vwprintf;
88 using std::vswprintf;
89 using std::wctomb;
90 using std::wcsrtombs;
91 using std::wcsstr;
92 using std::wctob;
93 using std::wmemchr;
94 using std::wmemcmp;
95 using std::wmemcpy;
96 using std::wmemmove;
97 using std::wmemset;
98 using std::wprintf;
99 using std::wscanf;
100 #endif /* not XPG4 and not XPG4v2 */
101 #endif /* __cplusplus >= 199711L */
102
103 #ifdef __cplusplus
104 extern "C" {
105 #endif
106
107 #if !defined(_STRICT_STDC) || defined(_XOPEN_SOURCE) || defined(__EXTENSIONS__)
108 #if !defined(_WCTYPE_T) || __cplusplus >= 199711L
109 #define _WCTYPE_T
110 typedef int wctype_t;
111 #endif
112 #endif /* !defined(_STRICT_STDC) || defined(_XOPEN_SOURCE)... */
113
114 /*
115  * XPG6 requires that va_list be defined as defined in <stdarg.h>,
116  * however, inclusion of <stdarg.h> breaks Standard C namespace.
117  */
118 #if defined(_XPG6) && !defined(_VA_LIST)
119 #define _VA_LIST
120 typedef __va_list va_list;
121 #endif /* defined(_XPG6) && !defined(_VA_LIST) */
122
123 #ifdef __STDC__
124
125 #if !defined(_STRICT_STDC) || defined(_XOPEN_SOURCE) || defined(__EXTENSIONS__)
126 #if __cplusplus >= 199711L
127 namespace std {
```

```

126 #endif
127 extern int iswalpha(wint_t);
128 extern int iswupper(wint_t);
129 extern int iswlower(wint_t);
130 extern int iswdigit(wint_t);
131 extern int iswxdigit(wint_t);
132 extern int iswalnum(wint_t);
133 extern int iswspace(wint_t);
134 extern int iswpunct(wint_t);
135 extern int iswprint(wint_t);
136 extern int iswgraph(wint_t);
137 extern int iswcntrl(wint_t);
138 extern int iswctype(wint_t, wctype_t);
139 extern wint_t tolower(wint_t);
140 extern wint_t toupper(wint_t);
141 #ifndef _STRICT_XPG7
142 extern wchar_t *wcswcs(const wchar_t *, const wchar_t *);
143 #endif
144 extern int wcswidth(const wchar_t *, size_t);
145 extern int wcwidth(wchar_t);
146 extern wctype_t wctype(const char *);
147 #if __cplusplus >= 199711L
148 } /* namespace std */

150 using std::iswalpha;
151 using std::iswupper;
152 using std::iswlower;
153 using std::iswdigit;
154 using std::iswxdigit;
155 using std::iswalnum;
156 using std::iswspace;
157 using std::iswpunct;
158 using std::iswprint;
159 using std::iswgraph;
160 using std::iswcntrl;
161 using std::iswctype;
162 using std::tolower;
163 using std::toupper;
164 #ifndef _STRICT_XPG7
165 using std::wcswcs;
166 #endif
167 using std::wcswidth;
168 using std::wcwidth;
169 using std::wctype;
170 #endif
171 #endif /* !defined(_STRICT_STDC) || defined(_XOPEN_SOURCE)... */

173 #if defined(_XPG7) || !defined(_STRICT_SYMBOLS)

175 #ifndef _LOCALE_T
176 #define _LOCALE_T
177 typedef struct _locale *locale_t;
178 #endif

180 extern size_t wcsnlen(const wchar_t *, size_t);
181 extern wchar_t *wcpncpy(wchar_t *_RESTRICT_KYWD, const wchar_t *_RESTRICT_KYWD,
182     size_t);
183 extern size_t wcsxfrm_l(wchar_t *_RESTRICT_KYWD, const wchar_t *_RESTRICT_KYWD,
184     size_t, locale_t);
185 extern int wcscoll_l(const wchar_t *, const wchar_t *, locale_t);
186 extern wchar_t *wcsdup(const wchar_t *);
187 extern int wscasecmp(const wchar_t *, const wchar_t *);
188 extern int wscasecmp_l(const wchar_t *, const wchar_t *, locale_t);
189 extern int wcsncasecmp(const wchar_t *, const wchar_t *, size_t);
190 extern int wcsncasecmp_l(const wchar_t *, const wchar_t *, size_t, locale_t);

```

```

192 extern size_t mbsnrtowcs(wchar_t *_RESTRICT_KYWD, const char **_RESTRICT_KYWD,
193     size_t, size_t, mbstate_t *_RESTRICT_KYWD);

195 #endif /* defined(_XPG7) || !defined(_STRICT_SYMBOLS) */

195 #else /* __STDC__ */

197 #if !defined(_STRICT_STDC) || defined(_XOPEN_SOURCE) || defined(__EXTENSIONS__)
198 extern int iswalpha();
199 extern int iswupper();
200 extern int iswlower();
201 extern int iswdigit();
202 extern int iswxdigit();
203 extern int iswalnum();
204 extern int iswspace();
205 extern int iswpunct();
206 extern int iswprint();
207 extern int iswgraph();
208 extern int iswcntrl();
209 extern int iswctype();
210 extern wint_t tolower();
211 extern wint_t toupper();
212 extern wchar_t *wcswcs();
213 extern int wcswidth();
214 extern int wcwidth();
215 extern wctype_t wctype();
216 #endif /* !defined(_STRICT_STDC) || defined(_XOPEN_SOURCE)... */

218 #if defined(_XPG7) || !defined(_STRICT_SYMBOLS)
219 extern size_t wcsnlen();
220 extern wchar_t *wcpncpy();
221 extern wchar_t *wcpncpy();
222 extern size_t wcsxfrm_l();
223 extern int wcscoll_l();
224 extern wchar_t *wcsdup();
225 extern int wscasecmp();
226 extern int wscasecmp_l();
227 extern int wcsncasecmp();
228 extern int wcsncasecmp_l();
229 extern size_t mbsnrtowcs();
230 #endif

232 #endif /* __STDC__ */

197 #ifdef __cplusplus
198 }
    unchanged portion omitted_

```

new/usr/src/man/Makefile.man

1

```
*****
1290 Sun Jul 27 18:01:23 2014
new/usr/src/man/Makefile.man
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wcscasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
*****
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 #
11 #
12 #
13 # Copyright 2011, Richard Lowe
14 # Copyright 2014 Nexenta Systems, Inc. All rights reserved.
15 #
16 #
17 MANDOC=          $(ONBLD_TOOLS)/bin/${MACH}/mandoc
18 ROOTMAN=         $(ROOT)/usr/share/man
19 ROOTHASMAN=      $(ROOT)/usr/has/man
20 FILEMODE=        0444
21 #
22 # The manual section being built, client Makefiles must set this to, for e.g.
23 # "3perl", with case matching that of the section name as installed.
24 #
25 # MANSECT=
26 #
27 MANCHECKS=       $(MANFILES:%=%.check)
28 ROOTMANFILES=    $(MANFILES:%=$(ROOTMAN)/man$(MANSECT)/%)
29 ROOTMANLINKS=    $(MANLINKS:%=$(ROOTMAN)/man$(MANSECT)/%)
30 #
31 all:
32 #
33 $(ROOTMAN)/man$(MANSECT)/% $(ROOTHASMAN)/man$(MANSECT)/%: %
34     $(INS.file)
35 #
36 $(MANCHECKS):
37     @$(ECHO) "checking $@:%.check=%"; \
38     $(MANDOC) -Tlint $@:%.check=%
39 #
40 $(MANLINKS):
41     $(RM) $@; $(SYMLINK) $(LINKSRC) $@
42 #
43 $(ROOTMANLINKS): $(MANLINKS)
44     $(RM) $@; $(CP) -RP $(@F) $(@D)
45 #
46 all:
47 #
48 check:           $(MANCHECKS)
49 #
50 clean:
51 #
52 #
53 .PARALLEL:
54 #
55 FRC:
```

7863 Sun Jul 27 18:01:23 2014

new/usr/src/man/man2/access.2

markup tweaks per mandoc author

fcntl.h only needed for faccessat

copyright

document standards for access, faccess

```

1  .\" Copyright 2014 Garrett D'Amore <garrett@damore.org>
2  '\" te
3  .\" Copyright (c) 2009, Sun Microsystems, Inc. All Rights Reserved.
4  .\" Copyright 1989 AT&T
5  .\" Portions Copyright (c) 1992, X/Open Company Limited All Rights Reserved
6  .\" Sun Microsystems, Inc. gratefully acknowledges The Open Group for permission
7  .\" The Institute of Electrical and Electronics Engineers and The Open Group, ha
8  .\" are reprinted and reproduced in electronic form in the Sun OS Reference Manu
9  .\" and Electronics Engineers, Inc and The Open Group. In the event of any discr
10 .\" This notice shall appear on any product containing this material.
11 .\" The contents of this file are subject to the terms of the Common Development
12 .\" See the License for the specific language governing permissions and limitat
13 .\" the fields enclosed by brackets \"[]\" replaced with your own identifying info
14 .Dd \"Jul 24, 2014\"
15 .Dt ACCESS 2
16 .Os
17 .Sh NAME
18 .Nm access ,
19 .Nm faccessat
20 .Nd determine accessibility of a file
21 .Sh SYNOPSIS
22 .In unistd.h
23 .Ft int
24 .Fo access
25 .Fa \"const char *path\"
26 .Fa \"int amode\"
27 .Fc
28 .In unistd.h
29 .In fcntl.h
30 .Ft int
31 .Fo faccessat
32 .Fa \"int fd\"
33 .Fa \"const char *path\"
34 .Fa \"int amode\"
35 .Fa \"int flag\"
36 .Fc
37 .Sh DESCRIPTION
38 The
39 .Fn access
40 function checks the file named by the pathname pointed to by
41 the
42 .Fa path
43 argument for accessibility according to the bit pattern
44 contained in
45 .Fa amode ,
46 using the real user ID in place of the
47 effective user ID and the real group IDR in place of the effective
13 .TH ACCESS 2 \"Jun 16, 2009\"
14 .SH NAME
15 access, faccessat \- determine accessibility of a file
16 .SH SYNOPSIS
17 .LP
18 .nf
19 #include <unistd.h>
20 #include <sys/fcntl.h>
22 \fBint\fR \fBfBaccess\fR(\fBconst char *\fR\fR\fIpath\fR, \fBint\fR \fR\fIamode\fR);

```

```

23 .fi
25 .LP
26 .nf
27 \fBint\fR \fBfBfaccessat\fR(\fBint\fR \fR\fIfd\fR, \fBconst char *\fR\fR\fIpath\fR, \fBint\fR
28 .fi
30 .SH DESCRIPTION
31 .sp
32 .LP
33 The \fBfBaccess()\fR function checks the file named by the pathname pointed to by
34 the \fR\fIpath\fR argument for accessibility according to the bit pattern
35 contained in \fR\fIamode\fR, using the real user \fR\fIBID\fR in place of the
36 effective user \fR\fIBID\fR and the real group \fR\fIBID\fR in place of the effective
48 group ID. This allows a setuid process to verify that the user running it would
49 have had permission to access this file.
50 .LP
51 The value of
52 .Fa amode
53 is either the bitwise inclusive
54 .Sy OR
55 of the access
56 permissions to be checked
57 .Po
58 .Dv R_OK ,
59 .Dv W_OK ,
60 .Dv X_OK
61 .Pc
62 or the existence
63 test,
64 .Dv F_OK .
65 .LP
66 These constants are defined in
67 .In unistd.h
68 as follows:
69 .Bl -tag -offset indent -width Dv
70 .It Dv R_OK
71 .sp
72 .LP
73 The value of \fR\fIamode\fR is either the bitwise inclusive \fR\fBOR\fR of the access
74 permissions to be checked (\fR\fBR_OK\fR, \fR\fBW_OK\fR, \fR\fBX_OK\fR) or the existence
75 test, \fR\fBF_OK\fR.
76 .sp
77 .LP
78 These constants are defined in <\fR\fBunistd.h\fR> as follows:
79 .sp
80 .ne 2
81 .na
82 \fBfBfBR_OK\fR\fR
83 .ad
84 .RS 8n
85 Test for read permission.
86 .It Dv W_OK
87 .RE
88 .sp
89 .ne 2
90 .na
91 \fBfBfBW_OK\fR\fR
92 .ad
93 .RS 8n
94 Test for write permission.
95 .It Dv X_OK
96 .RE
97 .sp
98 .sp

```

```

66 .ne 2
67 .na
68 \fB\fBX_OK\fR\fR
69 .ad
70 .RS 8n
75 Test for execute or search permission.
76 .It Dv F_OK
72 .RE

74 .sp
75 .ne 2
76 .na
77 \fB\fBF_OK\fR\fR
78 .ad
79 .RS 8n
77 Check existence of file
78 .El
79 .Lp
80 See
81 .Xr Intro 2
82 for additional information about "File Access Permission".
83 .Lp
81 .RE

83 .sp
84 .LP
85 See \fBIntro\fR(2) for additional information about "File Access Permission".
86 .sp
87 .LP
84 If any access permissions are to be checked, each will be checked individually,
85 as described in
86 .Xr Intro 2 .
87 If the process has appropriate privileges, an
88 implementation may indicate success for
89 .Dv X_OK
90 even if none of the execute file permission bits are set.
91 .Lp
92 The
93 .Fn faccessat
94 function is equivalent to the
95 .Fn access
96 function,
97 except in the case where
98 .Fa path
99 specifies a relative path. In this case the
100 file whose accessibility is to be determined is located relative to the
101 directory associated with the file descriptor
102 .Fa fd
103 instead of the current working directory.
104 .Lp
105 If
106 .Fn faccessat
107 is passed in the
108 .Fa fd
109 parameter the special value
110 .Dv AT_FDCWD ,
111 defined in
112 .In fcntl.h ,
113 the current working directory is

```

```

114 used and the behavior is identical to a call to
115 .Fn access .
116 .Lp
117 Values for
118 .Fa flag
119 are constructed by a bitwise-inclusive OR of flags from
120 the following list, defined in
121 .In fcntl.h :
122 .Bl -tag -offset indent -width Dv
123 .It Dv AT_EACCESS
124 The checks for accessibility are performed using the effective user and group
125 IDs instead of the real user and group ID as required in a call to
126 .Fn access .
127 .El
128 .Sh RETURN VALUES
129 If the requested access is permitted,
130 .Fn access
131 and
132 .Fn faccessat
133 succeed and return 0. Otherwise, \fB(0) is returned
134 and
135 .Va errno
136 is set to indicate the error.
137 .Sh ERRORS
138 The
139 .Fn access
140 and
141 .Fn faccessat
142 functions will fail if:
143 .Bl -tag -width Er
144 .It Er EACCES
145 \fB(0) is returned
146 .It Er EACCES
147 .RE

119 .Sh RETURN VALUES
120 .sp
121 .LP
122 If the requested access is permitted, \fB(0) is returned
123 \fB(0) is returned and return \fB(0) is returned
124 and \fB(0) is set to indicate the error.
125 .Sh ERRORS
126 .sp
127 .LP
128 The \fB(0) is returned and \fB(0) is returned
129 .sp
130 .ne 2
131 .na
132 \fB(0) is returned
133 .ad

```

```

134 .RS 16n
135 Permission bits of the file mode do not permit the requested access, or search
136 permission is denied on a component of the path prefix.
137 .
138 .It Er EFAULT
139 The
140 .Fa path
141 argument points to an illegal address.
142 .
143 .It Er EINTR
144 A signal was caught during the
145 .Fn access
146 function.
147 .
148 .It Er ELOOP
149 Too many symbolic links were encountered in resolving
150 .Fa path ,
151 or loop exists in symbolic links encountered during resolution of the
152 .Fa path
153 .RE
154 .
155 .sp
156 .ne 2
157 .na
158 \fB\fBEFAULT\fR\fR
159 .ad
160 .RS 16n
161 The \fIpath\fR argument points to an illegal address.
162 .RE
163 .
164 .sp
165 .ne 2
166 .na
167 \fB\fBEINTR\fR\fR
168 .ad
169 .RS 16n
170 A signal was caught during the \fBaccess()\fR function.
171 .RE
172 .
173 .sp
174 .ne 2
175 .na
176 \fB\fBELOOP\fR\fR
177 .ad
178 .RS 16n
179 Too many symbolic links were encountered in resolving \fIpath\fR, or loop
180 exists in symbolic links encountered during resolution of the \fIpath\fR
181 argument.
182 .
183 .It Er ENAMETOOLONG
184 The length of the
185 .Fa path
186 argument exceeds
187 .Brq Dv PATH_MAX ,
188 or a pathname
189 component is longer than
190 .Brq Dv NAME_MAX
191 while
192 .Dv _POSIX_NO_TRUNC
193 is in effect.
194 .
195 .It Er ENOENT
196 A component of
197 .Fa path
198 does not name an existing file or
199 .Fa path

```

```

182 is an empty string.
183 .
184 .It Er ENOLINK
185 The
186 .Fa path
187 argument points to a remote machine and the link to that machine
188 .RE
189 .
190 .sp
191 .ne 2
192 .na
193 \fB\fBENAMETOOLONG\fR\fR
194 .ad
195 .RS 16n
196 The length of the \fIpath\fR argument exceeds {\fBPATH_MAX\fR}, or a pathname
197 component is longer than {\fBNAME_MAX\fR} while \fB_POSIX_NO_TRUNC\fR is in
198 effect.
199 .RE
200 .
201 .sp
202 .ne 2
203 .na
204 \fB\fBENOENT\fR\fR
205 .ad
206 .RS 16n
207 A component of \fIpath\fR does not name an existing file or \fIpath\fR is an
208 empty string.
209 .RE
210 .
211 .sp
212 .ne 2
213 .na
214 \fB\fBENOLINK\fR\fR
215 .ad
216 .RS 16n
217 The \fIpath\fR argument points to a remote machine and the link to that machine
218 is no longer active.
219 .
220 .It Er ENOTDIR
221 .RE
222 .
223 .sp
224 .ne 2
225 .na
226 \fB\fBENOTDIR\fR\fR
227 .ad
228 .RS 16n
229 A component of the path prefix is not a directory.
230 .
231 .It Er ENXIO
232 The
233 .Fa path
234 argument points to a character or block device special file and
235 .RE
236 .
237 .sp
238 .ne 2
239 .na
240 \fB\fBENXIO\fR\fR
241 .ad
242 .RS 16n
243 The \fIpath\fR argument points to a character or block device special file and
244 the corresponding device has been retired by the fault management framework.
245 .
246 .It Er EROFS
247 .RE

```



```

218 .sp
219 .ne 2
220 .na
221 \fB\fBEROFS\fR\fR
222 .ad
223 .RS 16n
200 Write access is requested for a file on a read-only file system.
201 .
202 .El
203 .Lp
204 The
205 .Fn faccessat
206 function will fail if:
207 .Bl -tag -width Er
208 .It Er EBADF
209 The
210 .Fa path
211 argument does not specify an absolute path and the
212 .Fa fd
213 argument is neither
214 .Dv AT_FDCWD
215 nor a valid file descriptor open for reading or searching.
216 .El
217 .Lp
218 The
219 .Fn access
220 and
221 .Fn faccessat
222 functions may fail if:
223 .Bl -tag -width Er
224 .
225 .It Er EINVAL
226 The value of the
227 .Fa amode
228 argument is invalid.
229 .
230 .It Er ENAMETOOLONG
225 .RE

227 .sp
228 .LP
229 The \fBfaccessat()\fR function will fail if:
230 .sp
231 .ne 2
232 .na
233 \fB\fBEBADF\fR\fR
234 .ad
235 .RS 9n
236 The \fIpath\fR argument does not specify an absolute path and the \fIfd\fR
237 argument is neither \fBAT_FDCWD\fR nor a valid file descriptor open for reading
238 or searching.
239 .RE

241 .sp
242 .LP
243 The \fBfaccess()\fR and \fBfaccessat()\fR functions may fail if:
244 .sp
245 .ne 2
246 .na
247 \fB\fBEINVAL\fR\fR
248 .ad
249 .RS 16n
250 The value of the \fIamode\fR argument is invalid.
251 .RE

```

```

253 .sp
254 .ne 2
255 .na
256 \fB\fBENAMETOOLONG\fR\fR
257 .ad
258 .RS 16n
231 Pathname resolution of a symbolic link produced an intermediate result whose
232 length exceeds
233 .Brq Dv PATH_MAX .
234 .
235 .It Er ETXTBSY
260 length exceeds {\fBPATH_MAX\fR}.
261 .RE

263 .sp
264 .ne 2
265 .na
266 \fB\fBETXTBSY\fR\fR
267 .ad
268 .RS 16n
236 Write access is requested for a pure procedure (shared text) file that is being
237 executed.
238 .El
239 .Lp
240 The
241 .Fn faccessat
242 function may fail if:
243 .Bl -tag -width Er
244 .
245 .It Er BEINVAL
246 The value of the
247 .Fa flag
248 argument is not valid.
249 .
250 .It Er ENOTDIR
251 The
252 .Fa path
253 argument is not an absolute path and
254 .Fa fd
255 is neither
256 .Dv AT_FDCWD
257 nor a file descriptor associated with a directory.
258 .El
259 .Sh USAGE
260 Additional values of
261 .Fa amode
262 other than the set defined in the description
271 .RE

273 .sp
274 .LP
275 The \fBfaccessat()\fR function may fail if:
276 .sp
277 .ne 2
278 .na
279 \fB\fBEINVAL\fR\fR
280 .ad
281 .RS 11n
282 The value of the \fIflag\fR argument is not valid.
283 .RE

285 .sp
286 .ne 2
287 .na
288 \fB\fBENOTDIR\fR\fR
289 .ad

```

```

290 .RS 11n
291 The \fipath\fR argument is not an absolute path and \fifd\fR is neither
292 \fBAT_PDCWD\fR nor a file descriptor associated with a directory.
293 .RE

295 .SH USAGE
296 .sp
297 .LP
298 Additional values of \fiamode\fR other than the set defined in the description
299 might be valid, for example, if a system has extended access controls.
300 .LP
301 .LP
302 The purpose of the \fbfaccessat()\fR function is to enable the checking of the
303 accessibility of files in directories other than the current working directory
304 without exposure to race conditions. Any part of the path of a file could be
305 changed in parallel to a call to
306 \fbfaccessat()\fR function, it can be guaranteed that the file tested for
307 accessibility is located relative to the desired directory.
308 .SH INTERFACE STABILITY
309 .Sy Standard .
310 .Sh MT-LEVEL
311 .Sy Async-Signal-Safe .
312 .Sh SEE ALSO
313 .Xr Intro 2 ,
314 .Xr chmod 2 ,
315 .Xr stat 2 ,
316 .Xr standards 5
317 .Sh STANDARDS
318 The
319 .Fn access
320 function is defined in
321 .St -p1003.1 .
322 The
323 .Fn faccessat
324 function was introduced in
325 .St -p1003.1-2008 .
326 .SH ATTRIBUTES
327 .sp
328 .LP
329 See \fBattributes\fR(5) for descriptions of the following attributes:
330 .sp
331 .TS
332 box;
333 c | c
334 l | l .
335 ATTRIBUTE TYPE    ATTRIBUTE VALUE
336 -
337 Interface Stability    Committed
338 -
339 MT-Level              Async-Signal-Safe
340 -
341 Standard              See below.
342 .TE

```

```

329 .sp
330 .LP
331 For \fbaccess()\fR, see \fbstandards\fR(5).
332 .SH SEE ALSO
333 .sp
334 .LP
335 \fBIntro\fR(2), \fbchmod\fR(2), \fbstat\fR(2), \fbattributes\fR(5),
336 \fbstandards\fR(5)

```

new/usr/src/man/man2/chmod.2

1

13317 Sun Jul 27 18:01:24 2014

new/usr/src/man/man2/chmod.2

fchmod is standard

added fchmodat, etc.

```
1.\" Copyright 2014 Garrett D'Amore <garrett@damore.org>
1.\" te
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12.Dd \"Sep 12, 2005\"
13.Dt CHMOD 2
14.Os
15.
16.Sh NAME
17.
18.Nm chmod ,
19.Nm fchmod ,
20.Nm fchmodat
21.Nd change access permission mode of file
22.Sh SYNOPSIS
23.In sys/stat.h
24.
25.Ft int
26.Fo chmod
27.Fa \"const char *path\"
28.Fa \"mode_t mode\"
29.Fc
30.
31.Ft int
32.Fo fchmod
33.Fa \"int fildes\"
34.Fa \"mode_t mode\"
35.Fc
36.Ft int
37.Fo fchmodat
38.Fa \"int dirfd\"
39.Fa \"const char *path\"
40.Fa \"mode_t mode\"
41.Fa \"int flag\"
42.Fc
43.
44.Sh DESCRIPTION
45.
46.The
47.Fn chmod ,
48.Fn fchmod ,
49.and
50.Fn fchmodat
51.functions set the access permission
52.portion of the mode of the file whose name is given by
53.Fa path
54.or referenced by the open file descriptor
55.Fa fildes
56.to the bit pattern contained in
57.Fa mode .
58.Lp
59.Access permission bits are interpreted as follows:
```

new/usr/src/man/man2/chmod.2

2

```
60.B1 -column -offset indent \"S_IXOTH\" \"XXXXX\" infinity
61.It Dv S_ISUID Ta 04000 Ta Set user ID on execution.
62.It Dv S_ISGID Ta 020#0 Ta Set group ID on execution if # is
63 7, 5, 3, or 1. Enable mandatory file/record locking if # is
64 6, 4, 2, or 0.
65.It Dv S_ISVTX Ta 01000 Ta Sticky bit.
66.It Dv S_IRWXU Ta 00700 Ta Read, write, execute by owner.
67.It Dv S_IRUSR Ta 00400 Ta Read by owner.
68.It Dv S_IWUSR Ta 00200 Ta Write by owner.
69.It Dv S_IXUSR Ta 00100 Ta Execute (search if a directory) by owner.
70.It Dv S_IRWXG Ta 00070 Ta Read, write, execute by group.
71.It Dv S_IRGRP Ta 00040 Ta Read by group.
72.It Dv S_IWGRP Ta 00020 Ta Write by group.
73.It Dv S_IXGRP Ta 00010 Ta Execute by group.
74.It Dv S_IRWXO Ta 00007 Ta Read, write, execute (search) by others.
75.It Dv S_IROTH Ta 00004 Ta Read by others.
76.It Dv S_IWOTH Ta 00002 Ta Write by others.
77.It Dv S_IXOTH Ta 00001 Ta Execute by others.
78.El
79.Lp
12.TH CHMOD 2 \"Sep 12, 2005\"
13.SH NAME
14.chmod, fchmod \|- change access permission mode of file
15.SH SYNOPSIS
16.LP
17.nf
18#include <sys/types.h>
19#include <sys/stat.h>

21\fBint\fR \fBchmod\fR(\fBconst char *\fR\fRipath\fR, \fBmode_t\fR \fRmode\fR);
22.fi

24.LP
25.nf
26\fBint\fR \fBfchmod\fR(\fBint\fR \fRfildes\fR, \fBmode_t\fR \fRmode\fR);
27.fi

29.SH DESCRIPTION
30.sp
31.LP
32.The \fBchmod()\fR and \fBfchmod()\fR functions set the access permission
33.portion of the mode of the file whose name is given by \fRipath\fR or referenced
34.by the open file descriptor \fRfildes\fR to the bit pattern contained in
35.\fRmode\fR. Access permission bits are interpreted as follows:
36.sp

38.sp
39.TS
40.l l l
41.l l l .
42.\fBBS_ISUID\fR 04000 Set user ID on execution.
43.\fBBS_ISGID\fR 020#0 T{
44.Set group ID on execution if # is \fB7\fR, \fB5\fR, \fB3\fR, or \fB1\fR. Enable
45.T}
46.\fBBS_ISVTX\fR 01000 Sticky bit.
47.\fBBS_IRWXU\fR 00700 Read, write, execute by owner.
48.\fBBS_IRUSR\fR 00400 Read by owner.
49.\fBBS_IWUSR\fR 00200 Write by owner.
50.\fBBS_IXUSR\fR 00100 T{
51.Execute (search if a directory) by owner.
52.T}
53.\fBBS_IRWXG\fR 00070 Read, write, execute by group.
54.\fBBS_IRGRP\fR 00040 Read by group.
55.\fBBS_IWGRP\fR 00020 Write by group.
56.\fBBS_IXGRP\fR 00010 Execute by group.
57.\fBBS_IRWXO\fR 00007 Read, write, execute (search) by others.
```

```

58 \fBS_IROTH\fR 00004 Read by others.
59 \fBS_IWOTH\fR 00002 Write by others.
60 \fBS_IXOTH\fR 00001 Execute by others.
61 .TE

63 .sp
64 .LP
80 Modes are constructed by the bitwise OR operation of the access permission
81 bits.
82 .LP
67 .sp
68 .LP
83 The effective user ID of the process must match the owner of the file or the
84 process must have the appropriate privilege to change the mode of a file.
85 .LP
71 .sp
72 .LP
86 If the process is not a privileged process and the file is not a directory,
87 mode bit 01000 (save text image on execution) is cleared.
88 .LP
75 .sp
76 .LP
89 If neither the process is privileged nor the file's group is a member of the
90 process's supplementary group list, and the effective group ID of the process
91 does not match the group ID of the file, mode bit 02000 (set group ID on
92 execution) is cleared.
93 .LP
94 If a directory is writable and has
95 .Dv S_ISVTX
96 (the sticky bit) set, files
81 .sp
82 .LP
83 If a directory is writable and has \fBS_ISVTX\fR (the sticky bit) set, files
97 within that directory can be removed or renamed only if one or more of the
98 following is true (see
99 .Xr unlink 2
100 and
101 .Xr rename 2 :
102 .Bl -bullet -offset indent
103 .It
85 following is true (see \fBunlink\fR(2) and \fBrename\fR(2)):
86 .RS +4
87 .TP
88 .ie t \(\bu
89 .el o
104 the user owns the file
105 .It
91 .RE
92 .RS +4
93 .TP
94 .ie t \(\bu
95 .el o
106 the user owns the directory
107 .It
97 .RE
98 .RS +4
99 .TP
100 .ie t \(\bu
101 .el o
108 the file is writable by the user
109 .It
103 .RE
104 .RS +4
105 .TP
106 .ie t \(\bu
107 .el o

```

```

110 the user is a privileged user
111 .El
112 .LP
113 If a regular file is not executable and has
114 .Dv S_ISVTX
115 set, the file is
109 .RE
110 .sp
111 .LP
112 If a regular file is not executable and has \fBS_ISVTX\fR set, the file is
116 assumed to be a swap file. In this case, the system's page cache will not be
117 used to hold the file's data. If the
118 .Dv S_ISVTX
119 bit is set on any other file, the results are unspecified.
120 .LP
114 used to hold the file's data. If the \fBS_ISVTX\fR bit is set on any other
115 file, the results are unspecified.
116 .sp
117 .LP
121 If a directory has the set group ID bit set, a given file created within that
122 directory will have the same group ID as the directory. Otherwise, the newly
123 created file's group ID will be set to the effective group ID of the creating
124 process.
125 .LP
122 .sp
123 .LP
126 If the mode bit 02000 (set group ID on execution) is set and the mode bit 00010
127 (execute or search by group) is not set, mandatory file/record locking will
128 exist on a regular file, possibly affecting future calls to
129 .Xr open 2 ,
130 .Xr create 2 ,
131 .Xr read 2 ,
132 and
133 .Xr write 2
134 on this file.
135 .LP
136 If
137 .Fa fildes
138 references a shared memory object,
139 .Fn fchmod
140 need only
141 affect the
142 .Dv S_IRUSR , S_IRGRP , S_IROTH , S_IWUSR , S_IWGRP , S_IWOTH , S_IXUSR ,
143 .Dv S_IXGRP ,
144 and
145 .Dv S_IXOTH
126 exist on a regular file, possibly affecting future calls to \fBopen\fR(2),
127 \fBcreat\fR(2), \fBread\fR(2), and \fBwrite\fR(2) on this file.
128 .sp
129 .LP
130 If \fBfildes\fR references a shared memory object, \fBfchmod()\fR need only
131 affect the \fBS_IRUSR\fR, \fBS_IRGRP\fR, \fBS_IROTH\fR, \fBS_IWUSR\fR,
132 \fBS_IWGRP\fR, \fBS_IWOTH\fR, \fBS_IXUSR\fR, \fBS_IXGRP\fR, and \fBS_IXOTH\fR
146 file permission bits.
147 .LP
148 If
149 .Fa fildes
150 refers to a socket, or to a stream that is attached to an object in
151 the filesystem name space with
152 .Xr fattach 3C ,
153 .Fn fchmod
154 takes no action and returns successfully.
155 .LP
156 Upon successful completion,
157 .Fn chmod
158 .Fn fchmod

```

```

159 and
160 .Fn fchmodat
161 mark for update the
162 .Vt st_ctime
163 field of the file.
164 .Lp
165 The
166 .Fn fchmodat
167 function operates like
168 .Fn chmod
169 except that if
170 .Fa path
171 is relative, then the file to be changed is determined relative to
172 the open directory presented by
173 .Fa dirfd ,
174 instead of the current working directory. The special value
175 .Dv AT_FDCWD can be supplied for
176 .Fa dirfd
177 to indicate the current working directory.
178 .Lp
179 If
180 .Fa dirfd
181 was opened without
182 .Dv O_SEARCH ,
183 the
184 .Fn fchmodat
185 function checks whether directory searches are permitted using the current
186 permissions of the underlying directory.
187 .Lp
188 The
189 .Fa flag
190 argument is bitwise
191 .Sy OR
192 of the following flags:
193 .Bl -tag -width Dv -offset indent
194 .It Dv AT_SYMLINK_NOFOLLOW
195 .If
196 .Fa path
197 is a symbolic link, then the mode of the link is changed instead of the
198 target.
199 .El
200 .
201 .Sh RETURN VALUES
202 .
203 Upon successful completion, 0 is returned. Otherwise, (mil is
204 returned, the file mode is unchanged, and
205 .Va errno
206 is set to indicate the error.
207 .
208 .Sh EXAMPLES
209 .
210 .Ss Example 1 No Set Read Permissions for User, Group, and Others
134 .sp
135 .Lp
136 If fildes refers to a socket, fchmod() does not fail but no action
137 is taken.
138 .sp
139 .Lp
140 If fildes refers to a stream that is attached to an object in the file
141 system name space with fattach(3C), the fchmod() call performs no
142 action and returns successfully.
143 .sp
144 .Lp
145 Upon successful completion, fchmod() and fchmodat() mark for update
146 the fst_ctime field of the file.
147 .Sh RETURN VALUES

```

```

148 .sp
149 .Lp
150 Upon successful completion, fB0 is returned. Otherwise, fB(mil is
151 returned, the file mode is unchanged, and fBerrno is set to indicate the
152 error.
153 .SH ERRORS
154 .sp
155 .Lp
156 The fBchmod() and fBfchmod() functions will fail if:
157 .sp
158 .ne 2
159 .na
160 fBfBEIO
161 .ad
162 .RS 9n
163 An I/O error occurred while reading from or writing to the file system.
164 .RE

166 .sp
167 .ne 2
168 .na
169 fBfBEPERM
170 .ad
171 .RS 9n
172 The effective user ID does not match the owner of the file and the process does
173 not have appropriate privilege.
174 .sp
175 The {fBPRIV_FILE_OWNER} privilege overrides constraints on ownership when
176 changing permissions on a file.
177 .sp
178 The {fBPRIV_FILE_SETID} privilege overrides constraints on ownership when
179 adding the setuid or setgid bits to an executable file or a directory. When
180 adding the setuid bit to a root owned executable, additional restrictions
181 apply. See fBprivileges(5).
182 .RE

184 .sp
185 .Lp
186 The fBchmod() function will fail if:
187 .sp
188 .ne 2
189 .na
190 fBfBEACCES
191 .ad
192 .RS 16n
193 Search permission is denied on a component of the path prefix of fIpath.
194 The privilege {fBFILE_DAC_SEARCH} overrides file permissions restrictions
195 in that case.
196 .RE

198 .sp
199 .ne 2
200 .na
201 fBfBDEFAULT
202 .ad
203 .RS 16n
204 The fIpath argument points to an illegal address.
205 .RE

207 .sp
208 .ne 2
209 .na
210 fBfBELOOP
211 .ad
212 .RS 16n
213 A loop exists in symbolic links encountered during the resolution of the

```

```

214 \fIpath\fR argument.
215 .RE

217 .sp
218 .ne 2
219 .na
220 \fB\fBENAMETOOLONG\fR\fR
221 .ad
222 .RS 16n
223 The length of the \fIpath\fR argument exceeds \fBPATH_MAX\fR, or the length of
224 a \fIpath\fR component exceeds \fBNAME_MAX\fR while \fB_POSIX_NO_TRUNC\fR is in
225 effect.
226 .RE

228 .sp
229 .ne 2
230 .na
231 \fB\fBENOENT\fR\fR
232 .ad
233 .RS 16n
234 Either a component of the path prefix or the file referred to by \fIpath\fR
235 does not exist or is a null pathname.
236 .RE

238 .sp
239 .ne 2
240 .na
241 \fB\fBENOLINK\fR\fR
242 .ad
243 .RS 16n
244 The \fIfildes\fR argument points to a remote machine and the link to that
245 machine is no longer active.
246 .RE

248 .sp
249 .ne 2
250 .na
251 \fB\fBNOTDIR\fR\fR
252 .ad
253 .RS 16n
254 A component of the prefix of \fIpath\fR is not a directory.
255 .RE

257 .sp
258 .ne 2
259 .na
260 \fB\fBEROFS\fR\fR
261 .ad
262 .RS 16n
263 The file referred to by \fIpath\fR resides on a read-only file system.
264 .RE

266 .sp
267 .LP
268 The \fBfchmod()\fR function will fail if:
269 .sp
270 .ne 2
271 .na
272 \fB\fBEBADF\fR\fR
273 .ad
274 .RS 11n
275 The \fIfildes\fR argument is not an open file descriptor
276 .RE

278 .sp
279 .ne 2

```

```

280 .na
281 \fB\fBENOLINK\fR\fR
282 .ad
283 .RS 11n
284 The \fIpath\fR argument points to a remote machine and the link to that machine
285 is no longer active.
286 .RE

288 .sp
289 .ne 2
290 .na
291 \fB\fBEROFS\fR\fR
292 .ad
293 .RS 11n
294 The file referred to by \fIfildes\fR resides on a read-only file system.
295 .RE

297 .sp
298 .LP
299 The \fBchmod()\fR and \fBfchmod()\fR functions may fail if:
300 .sp
301 .ne 2
302 .na
303 \fB\fBEINTR\fR\fR
304 .ad
305 .RS 10n
306 A signal was caught during execution of the function.
307 .RE

309 .sp
310 .ne 2
311 .na
312 \fB\fBEINVAL\fR\fR
313 .ad
314 .RS 10n
315 The value of the \fImode\fR argument is invalid.
316 .RE

318 .sp
319 .LP
320 The \fBchmod()\fR function may fail if:
321 .sp
322 .ne 2
323 .na
324 \fB\fBELOOP\fR\fR
325 .ad
326 .RS 16n
327 More than {\fBSYMLOOP_MAX\fR} symbolic links were encountered during the
328 resolution of the \fIpath\fR argument.
329 .RE

331 .sp
332 .ne 2
333 .na
334 \fB\fBENAMETOOLONG\fR\fR
335 .ad
336 .RS 16n
337 As a result of encountering a symbolic link in resolution of the \fIpath\fR
338 argument, the length of the substituted pathname strings exceeds
339 {\fBPATH_MAX\fR}.
340 .RE

342 .sp
343 .LP
344 The \fBfchmod()\fR function may fail if:
345 .sp

```

```

346 .ne 2
347 .na
348 \fB\fBEINVAL\fR\fR
349 .ad
350 .RS 10n
351 The \fIfildes\fR argument refers to a pipe and the system disallows execution
352 of this function on a pipe.
353 .RE

355 .SH EXAMPLES
356 .LP
357 \fBExample 1 \fRSet Read Permissions for User, Group, and Others
358 .sp
359 .LP
211 The following example sets read permissions for the owner, group, and others.
212 .Bd -literal -offset indent

362 .sp
363 .in +2
364 .nf
213 #include <sys/stat.h>
214 const char *path;
215 \&...
216 chmod(path, S_IRUSR|S_IRGRP|S_IROTH);
217 .Ed
218 .
219 .Ss Example 2 No Set Read, Write, and Execute Permissions for the Owner Only
219 .fi
369 .in -2
370 .in -2

372 .LP
373 \fBExample 2 \fRSet Read, Write, and Execute Permissions for the Owner Only
374 .sp
375 .LP
220 The following example sets read, write, and execute permissions for the owner,
221 and no permissions for group and others.
222 .Bd -literal -offset indent

379 .sp
380 .in +2
381 .nf
223 #include <sys/stat.h>
224 const char *path;
225 \&...
226 chmod(path, S_IRWXU);
227 .Ed
228 .
229 .Ss Example 3 No Set Different Permissions for Owner, Group, and Other
386 .fi
387 .in -2

389 .LP
390 \fBExample 3 \fRSet Different Permissions for Owner, Group, and Other
391 .sp
392 .LP
230 The following example sets owner permissions for CHANGEFILE to read, write, and
231 execute, group permissions to read and execute, and other permissions to read.
232 .Bd -literal -offset indent

396 .sp
397 .in +2
398 .nf
233 #include <sys/stat.h>
234 #define CHANGEFILE "/etc/myfile"
235 \&...
236 chmod(CHANGEFILE, S_IRWXU|S_IRGRP|S_IXGRP|S_IROTH);

```

```

237 .Ed
238 .Ss Example 4 No Set and Checking File Permissions
403 .fi
404 .in -2

406 .LP
407 \fBExample 4 \fRSet and Checking File Permissions
408 .sp
409 .LP
239 The following example sets the file permission bits for a file named
240 .Pa /home/cnd/mod1 ,
241 then calls the
242 .Xr stat 2
243 function to verify the permissions.
244 .Bd -literal -offset indent
411 \fB/home/cnd/mod1\fR, then calls the \fBstat\fR(2) function to verify the
412 permissions.

414 .sp
415 .in +2
416 .nf
245 #include <sys/types.h>
246 #include <sys/stat.h>
247 int status;
248 struct stat buffer
249 \&...
250 chmod("home/cnd/mod1", S_IRWXU|S_IRWXG|S_IROTH|S_IWOTH);
251 status = stat("home/cnd/mod1", &buffer);
252 .Ed
253 .
254 .Sh ERRORS
255 .
256 The
257 .Fn chmod ,
258 .Fn fchmod
259 and
260 .Fn fchmodat
261 functions will fail if:
262 .Bl -tag -width Er
263 .It Er EIO
264 An I/O error occurred while reading from or writing to the file system.
265 .It Er EPERM
266 The effective user ID does not match the owner of the file and the process does
267 not have appropriate privilege.
268 .Lp
269 The
270 .Brq Dv PRIV_FILE_OWNER
271 privilege overrides constraints on ownership when
272 changing permissions on a file.
273 .Lp
274 The
275 .Brq Dv PRIV_FILE_SETID
276 privilege overrides constraints on ownership when
277 adding the setuid or setgid bits to an executable file or a directory. When
278 adding the setuid bit to a root owned executable, additional restrictions
279 apply. See
280 .Xr privileges 5 .
281 .El
282 .Lp
283 The
284 .Fn chmod
285 and
286 .Fn fchmodat
287 functions will fail if:
288 .Bl -tag -width Er
289 .

```

```

290 .It Er EACCES
291 Search permission is denied on a component of the path prefix of
292 .Fa path .
293 The privilege
294 .Brq Dv FILE_DAC_SEARCH
295 overrides file permissions restrictions in that case.
296 .
297 .It Er EFAULT
298 The
299 .Fa path
300 argument points to an illegal address.
301 .
302 .It Er ELOOP
303 A loop exists in symbolic links encountered during the resolution of the
304 .Fa path
305 argument.
306 .
307 .It Er ENAMETOOLONG
308 The length of the
309 .Fa path
310 argument exceeds
311 .Brq Dv PATH_MAX .
312 .
313 .It Er NOENT
314 Either a component of the path prefix or the file referred to by
315 .Fa path
316 does not exist or is a null pathname.
317 .
318 .It Er ENOLINK
319 The
320 .Fa path
321 argument points to a remote machine and the link to that
322 machine is no longer active.
323 .
324 .It Er ENOTDIR
325 A component of the prefix of
326 .Fa path
327 is not a directory.
328 .
329 .It Er EROFS
330 The file referred to by
331 .Fa path
332 resides on a read-only file system.
333 .El
334 .Lp
335 The
336 .Fn fchmod
337 function will fail if:
338 .Bl -tag -width Er
339 .
340 .It Er EBADF
341 The
342 .Fa filedes
343 argument is not an open file descriptor
344 .
345 .It Er ENOLINK
346 The file referred to by
347 .Fa filedes
348 argument points to a remote machine and the link to that machine
349 is no longer active.
350 .
351 .It Er EROFS
352 The file referred to by
353 .Fa filedes
354 resides on a read-only file system.
355 .El

```

```

356 .Lp
357 The
358 .Fn fchmodat
359 function will fail if:
360 .Bl -tag -width Er
361 .
362 .It Er EBADF
363 The
364 .Fa path
365 argument does not specify an absolute path, and
366 .Fa dirfd
367 is neither
368 .Dv AT_FDCWD
369 nor a file descriptor open for reading or searching.
370 .
371 .It Er EACCES
372 The
373 .Fa dirfd
374 descriptor was opened without
375 .Dv O_SEARCH
376 and the underlying directory permissions do not allow directory
377 searches.
378 .El
379 .
380 .Lp
381 The
382 .Fn chmod ,
383 .Fn fchmod ,
384 and
385 .Fn fchmodat
386 functions may fail if:
387 .Bl -tag -width Er
388 .
389 .It Er EINTR
390 A signal was caught during execution of the function.
391 .
392 .It Er EINVAL
393 The value of the
394 .Fa mode
395 argument is invalid.
396 .El
397 .Lp
398 The
399 .Fn chmod
400 and
401 .Fn fchmodat
402 functions may fail if:
403 .Bl -tag -width Er
404 .
405 .It Er ELOOP
406 More than
407 .Brq Dv SYMLOOP_MAX
408 symbolic links were encountered during the
409 resolution of the
410 .Fa path
411 argument.
412 .
413 .It Er ENAMETOOLONG
414 As a result of encountering a symbolic link in resolution of the
415 .Fa path
416 argument, the length of the substituted pathname exceed
417 .Brq Dv PATH_MAX .
418 .El
419 .Lp
420 The
421 .Fn fchmod

```



```

422 function may fail if:
423 .Bl -tag -width Er
424 .It EINVAL
425 The
426 .Fa fildes
427 argument refers to a pipe and the system disallows execution
428 of this function on a pipe.
429 .El
430 .
431 .Lp
432 The
433 .Fn fchmodat
434 function may fail if:
435 .Bl -tag -width Er
436 .It Er EINVAL
437 The value of
438 .Fa flag
439 is invalid.
440 .It Er ENOTDIR
441 The
442 .Fa dirfd
443 argument is not a file descriptor opened on a directory or
444 the special value
445 .Dv AT_CWDFD ,
446 and
447 .Fa path
448 is not an absolute directory name.
449 .It Er EOPNOTSUPP
450 The
451 .Fa flag
452 argument contains the bit
453 .Dv AT_SYMLINK_NOFOLLOW ,
454 the
455 .Fa path
456 is a symbolic link, and the underlying filesystem does not support
457 changing the mode of symbolic links.
458 .El
459 .
460 .Sh USAGE
461 If
462 .Fn chmod ,
463 .Fn fchmod ,
464 or
465 .Fn fchmodat
466 are used to change the file group owner
467 .fi
468 .in -2
469 .
470 .Sh USAGE
471 .sp
472 .Lp
473 If \fBchmod() or \fBfchmod() is used to change the file group owner
474 permissions on a file with non-trivial ACL entries, only the ACL mask is set to
475 the new permissions and the group owner permission bits in the file's mode
476 field (defined in
477 .Xr mknod 2 )
478 are unchanged. A non-trivial ACL entry is
479 field (defined in \fBmknod(2)) are unchanged. A non-trivial ACL entry is
480 one whose meaning cannot be represented in the file's mode field alone. The new
481 ACL mask permissions might change the effective permissions for additional
482 users and groups that have ACL entries on the file.
483 .Lp
484 The
485 .Fn fchmodat
486 function is intended to enable changing permissions in directories other than
487 the current working directory without race conditions.

```

```

480 .
481 .Sh INTERFACE STABILITY
482 .
483 .Sy Standard .
484 .
485 .Sh MT-LEVEL
486 .
487 .Sy Async-Signal-Safe .
488 .
489 .Sh SEE ALSO
490 .
491 .Xr chmod 1 ,
492 .Xr chown 2 ,
493 .Xr creat 2 ,
494 .Xr fcntl 2 ,
495 .Xr mknod 2 ,
496 .Xr open 2 ,
497 .Xr read 2 ,
498 .Xr rename 2 ,
499 .Xr stat 2 ,
500 .Xr write 2 ,
501 .Xr fattach 3C ,
502 .Xr mkfifo 3C ,
503 .Xr stat.h 3HEAD ,
504 .Xr privileges 5 ,
505 .Xr standards 5
506 .Rs
507 .%T Programming Interfaces Guide
508 .Re
509 .
510 .Sh STANDARDS
511 .
512 The
513 .Fn chmod
514 function was introduced in
515 .At
516 and is specified in
517 .St -p1003.1 .
518 The
519 .Fn fchmod
520 function was introduced in
521 .St -xpg4.2 .
522 The
523 .Fn fchmodat
524 function was introduced in
525 .St -p1003.1-2008 .
526 .Sh ATTRIBUTES
527 .sp
528 .Lp
529 See \fBattributes(5) for descriptions of the following attributes:
530 .sp
531 .
532 .sp
533 .TS
534 box;
535 c | c
536 l | l .
537 ATTRIBUTE TYPE    ATTRIBUTE VALUE
538 -
539 Interface Stability    Standard
540 -
541 MT-Level            Async-Signal-Safe
542 .TE
543 .
544 .Sh SEE ALSO
545 .sp

```

```
457 .LP
458 \fBchmod\fR(1), \fBchown\fR(2), \fBcreat\fR(2), \fBfcntl\fR(2), \fBmknod\fR(2),
459 \fBopen\fR(2), \fBread\fR(2), \fBrename\fR(2), \fBstat\fR(2), \fBwrite\fR(2),
460 \fBfattach\fR(3C), \fBmkfifo\fR(3C), \fBstat.h\fR(3HEAD), \fBattributes\fR(5),
461 \fBprivileges\fR(5), \fBstandards\fR(5)
462 .sp
463 .LP
464 \fIProgramming Interfaces Guide\fR
```

5470 Sun Jul 27 18:01:24 2014
new/usr/src/man/man2/getcontext.2
Minor markup tweaks (Sy instead of Nm).
first round of POSIX 2008 stuff

```

1  \" te
2  \" Copyright 1989 AT&T Copyright (c) 2001, Sun Microsystems, Inc. All Rights
3  \" Sun Microsystems, Inc. gratefully acknowledges The Open Group for permission
4  \" http://www.opengroup.org/bookstore/.
5  \" The Institute of Electrical and Electronics Engineers and The Open Group, ha
6  \" This notice shall appear on any product containing this material.
7  \" The contents of this file are subject to the terms of the Common Development
8  \" You can obtain a copy of the license at usr/src/OPENSOLARIS.LICENSE or http:
9  \" When distributing Covered Code, include this CDDL HEADER in each file and in
10 .Dd \"Jul 20, 2014\"
11 .Dt GETCONTEXT 2
12 .Os
13 .Sh NAME
14 .Nm getcontext, setcontext
15 .Nd get and set current user context
16 .Sh SYNOPSIS
17 .In ucontext.h
18 .Ft int
19 .Fn getcontext \"ucontext_t *ucp\"
20 .Ft int
21 .Fn setcontext \"const ucontext_t *ucp\"
22 .Sh DESCRIPTION
23 The
24 .Fn getcontext
25 function initializes the structure pointed to by
26 .Fa ucp
27 to the current user context of the calling process. The
28 .Fa ucontext_t
29 type that
30 .Fa ucp
31 points to defines the user context and
32 .TH GETCONTEXT 2 \"Feb 5, 2001\"
33 .SH NAME
34 getcontext, setcontext \- get and set current user context
35 .SH SYNOPSIS
36 .LP
37 .nf
38 #include <ucontext.h>
39
40 \fBint\fR \fBgetcontext\fR(\fBUcontext_t * \fR\fR\fR);
41 .fi
42
43 .LP
44 .nf
45 \fBint\fR \fBsetcontext\fR(\fBconst ucontext_t * \fR\fR\fR);
46 .fi
47
48 .SH DESCRIPTION
49 .sp
50 .LP
51 The \fBgetcontext()\fR function initializes the structure pointed to by
52 \fR\fR to the current user context of the calling process. The
53 \fBUcontext_t\fR type that \fR\fR points to defines the user context and
54 includes the contents of the calling process' machine registers, the signal
55 mask, and the current execution stack.
56 .LP
57 The
58 .Fn setcontext
59 function restores the user context pointed to by
60 .Fa ucp .

```

```

38 A successful call to
39 .Fn setcontext
40 does not return; program
41 execution resumes at the point specified by the
42 .Fa ucp
43 argument passed to
44 .Fn setcontext .
45 The
46 .Fa ucp
47 argument should be created either by a prior
48 call to
49 .Fn getcontext ,
50 or by being passed as an argument to a signal
51 handler.
52 .LP
53 If the
54 .Fa ucp
55 argument was created with
56 .Fn getcontext ,
57 program execution continues as if the corresponding call of
58 .Fn getcontext
59 had just returned.
60 .LP
61 If the
62 .Fa ucp
63 argument was created with
64 .Xr makecontext 3C ,
65 program execution continues with the function passed to
66 .Xr makecontext 3C .
67 .sp
68 .LP
69 The \fBsetcontext()\fR function restores the user context pointed to by
70 \fR\fR. A successful call to \fBsetcontext()\fR does not return; program
71 execution resumes at the point specified by the \fR\fR argument passed to
72 \fBsetcontext()\fR. The \fR\fR argument should be created either by a prior
73 call to \fBgetcontext()\fR, or by being passed as an argument to a signal
74 handler. If the \fR\fR argument was created with \fBgetcontext()\fR, program
75 execution continues as if the corresponding call of \fBgetcontext()\fR had just
76 returned. If the \fR\fR argument was created with \fBmakecontext\fR(3C),
77 program execution continues with the function passed to \fBmakecontext\fR(3C).
78 When that function returns, the process continues as if after a call to
79 .Fn setcontext
80 with the
81 .Fa ucp
82 argument that was input to
83 .Xr makecontext 3C .
84 .LP
85 If the
86 .Fa ucp
87 argument was passed to a signal
88 \fBsetcontext()\fR with the \fR\fR argument that was input to
89 \fBmakecontext\fR(3C). If the \fR\fR argument was passed to a signal
90 handler, program execution continues with the program instruction following the
91 instruction interrupted by the signal.
92 .LP
93 If the
94 .Fa uc_link
95 member of the
96 .Ft ucontext_t
97 structure pointed to by the
98 .Fa ucp
99 argument is equal to 0,
100 instruction interrupted by the signal. If the \fBuc_link\fR member of the
101 \fBUcontext_t\fR structure pointed to by the \fR\fR argument is equal to 0,
102 then this context is the main context, and the process will exit when this
103 context returns. The effects of passing a

```

```

89 .Fa ucp
90 argument obtained from any other source are unspecified.
91 .Sh RETURN VALUES
92 On successful completion,
93 .Fn setcontext
94 does not return and
95 .Fn getcontext()
96 returns 0. Otherwise, -1 is returned.
97 .Sh ERRORS
98 context returns. The effects of passing a \fIucp\fR argument obtained from any
99 other source are unspecified.
100 .SH RETURN VALUES
101 .sp
102 .LP
103 On successful completion, \fBsetcontext()\fR does not return and
104 \fBgetcontext()\fR returns \fB0\fR. Otherwise, \fB(mil)\fR is returned.
105 .SH ERRORS
106 .sp
107 .LP
108 No errors are defined.
109 .Sh USAGE
110 .SH USAGE
111 .sp
112 .LP
113 When a signal handler is executed, the current user context is saved and a new
114 context is created. If the thread leaves the signal handler via
115 .Xr longjmp 3C ,
116 then it is unspecified whether the context at the time of
117 the corresponding
118 .Xr setjmp 3C
119 call is restored and thus whether future
120 calls to
121 .Fn getcontext
122 will provide an accurate representation of the
123 current context, since the context restored by
124 .Xr longjmp 3C
125 may not contain all the information that
126 .Fn setcontext
127 requires. Signal handlers
128 should use
129 .Xr siglongjmp 3C
130 instead.
131 .Lp
132 Portable applications should not modify or access the
133 .Fa uc_mcontext
134 member
135 of
136 .Ft ucontext_t .
137 A portable application cannot assume that context
138 includes any process-wide static data, possibly including
139 .Va errno .
140 Users manipulating contexts should take care to handle these explicitly when
141 \fBlongjmp()\fR(3UCB), then it is unspecified whether the context at the time of
142 the corresponding \fBsetjmp()\fR(3UCB) call is restored and thus whether future
143 calls to \fBgetcontext()\fR will provide an accurate representation of the
144 current context, since the context restored by \fBlongjmp()\fR(3UCB) may not
145 contain all the information that \fBsetcontext()\fR requires. Signal handlers
146 should use \fBsiglongjmp()\fR(3C) instead.
147 .sp
148 .LP
149 Portable applications should not modify or access the \fBuc_mcontext\fR member
150 of \fBucontext_t\fR. A portable application cannot assume that context
151 includes any process-wide static data, possibly including \fBerrno\fR. Users
152 manipulating contexts should take care to handle these explicitly when
153 required.
154 .Lp

```

```

130 Portable applications should make use of the
131 .Xr pthreads 5
132 routines for co-processing instead of these routines.
133 .Sh INTERFACE STABILITY
134 .Sy Obsolete Standard .
135 .Sh SEE ALSO
136 .Xr sigaction 2 ,
137 .Xr sigaltstack 2 ,
138 .Xr sigprocmask 2 ,
139 .Xr bsd_signal 3C ,
140 .Xr makecontext 3C ,
141 .Xr setjmp 3C ,
142 .Xr sigsetjmp 3C ,
143 .Xr ucontext.h 3HEAD ,
144 .Xr pthreads 5 ,
145 .Xr standards 5
146 .Sh STANDARDS
147 These routines were introduced in
148 .St -xpg4.2
149 and subsequently removed in
150 .St -p1003.1-2008 .
151 .SH ATTRIBUTES
152 .sp
153 .LP
154 See \fBattributes\fR(5) for descriptions of the following attributes:
155 .sp
156 .sp
157 .TS
158 box;
159 c | c
160 l | l .
161 .
162 ATTRIBUTE TYPE      ATTRIBUTE VALUE
163 _
164 Interface Stability      Standard
165 .TE
166 .
167 .SH SEE ALSO
168 .sp
169 .LP
170 \fBsigaction()\fR(2), \fBsigaltstack()\fR(2), \fBsigprocmask()\fR(2),
171 \fBbsd_signal()\fR(3C), \fBmakecontext()\fR(3C), \fBsetjmp()\fR(3UCB),
172 \fBsigsetjmp()\fR(3C), \fBucontext.h\fR(3HEAD), \fBattributes()\fR(5),
173 \fBstandards()\fR(5)

```

new/usr/src/man/man3c/Makefile

1

```
*****
64477 Sun Jul 27 18:01:26 2014
new/usr/src/man/man3c/Makefile
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wcscasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
*****
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 #
11 #
12 #
13 # Copyright 2011, Richard Lowe
14 # Copyright 2013 Nexenta Systems, Inc. All rights reserved.
15 # Copyright 2013, OmniTI Computer Consulting, Inc. All rights reserved.
16 # Copyright 2014 Garrett D'Amore <garrett@damore.org>
17 #
18 #
19 include      $(SRC)/Makefile.master
20
21 MANSECT=      3c
22
23 MANFILES=     _fbufsize.3c      \
24                _longjmp.3c      \
25                _stack_grow.3c   \
26                a64l.3c          \
27                abort.3c         \
28                abs.3c           \
29                addsev.3c        \
30                addseverity.3c   \
31                aio_cancel.3c    \
32                aio_error.3c     \
33                aio_fsync.3c     \
34                aio_read.3c      \
35                aio_return.3c    \
36                aio_suspend.3c   \
37                aio_waitn.3c     \
38                aio_write.3c     \
39                aiocancel.3c     \
40                aioread.3c       \
41                aiowait.3c       \
42                assert.3c       \
43                atexit.3c       \
44                atomic_add.3c    \
45                atomic_and.3c    \
46                atomic_bits.3c   \
47                atomic_cas.3c    \
48                atomic_dec.3c    \
49                atomic_inc.3c    \
50                atomic_ops.3c    \
51                atomic_or.3c     \
52                atomic_swap.3c   \
53                attropen.3c      \
54                basename.3c     \
55                bsd_signal.3c    \
56                bsearch.3c      \
57                bstring.3c      \
58                btowc.3c        \
59                catgets.3c      \
```

new/usr/src/man/man3c/Makefile

2

```
60                catopen.3c      \
61                cfgetispeed.3c   \
62                cfsetispeed.3c   \
63                clock.3c         \
64                clock_nanosleep.3c \
65                clock_settime.3c \
66                closedir.3c      \
67                closefrom.3c     \
68                cond_init.3c     \
69                confstr.3c       \
70                crypt.3c         \
71                crypt_genhash_impl.3c \
72                crypt_gensalt.3c \
73                crypt_gensalt_impl.3c \
74                cset.3c          \
75                ctermid.3c       \
76                ctime.3c         \
77                ctype.3c         \
78                cuserid.3c       \
79                daemon.3c        \
80                decimal_to_floating.3c \
81                difftime.3c      \
82                directio.3c      \
83                dirfd.3c         \
84                dirname.3c       \
85                div.3c           \
86                dladdr.3c        \
87                dlclose.3c       \
88                dldump.3c        \
89                dlerror.3c       \
90                dlinfo.3c        \
91                dlopen.3c        \
92                dlsym.3c         \
93                door_bind.3c     \
94                door_call.3c     \
95                door_create.3c   \
96                door_cred.3c     \
97                door_getparam.3c \
98                door_info.3c     \
99                door_return.3c   \
100                door_revoke.3c  \
101                door_server_create.3c \
102                door_ucred.3c    \
103                drand48.3c       \
104                dup2.3c          \
105                econvert.3c      \
106                ecvt.3c          \
107                enable_extended_FILE_stdio.3c \
108                encrypt.3c       \
109                end.3c           \
110                err.3c           \
111                euclen.3c        \
112                exit.3c          \
113                fattach.3c       \
114                fclose.3c       \
115                fdatsync.3c      \
116                fdetach.3c      \
117                fdopen.3c       \
118                ferror.3c       \
119                fflush.3c       \
120                ffs.3c          \
121                fgetattr.3c      \
122                fgetc.3c        \
123                fgetpos.3c       \
124                fgetwc.3c        \
125                floating_to_decimal.3c \
```

```

126 flockfile.3c
127 fmtmsg.3c
128 fnmatch.3c
129 fopen.3c
130 fpgetround.3c
131 fputc.3c
132 fputwc.3c
133 fputws.3c
134 fread.3c
135 freopen.3c
136 fseek.3c
137 fsetpos.3c
138 fsync.3c
139 ftell.3c
140 ftime.3c
141 ftok.3c
142 ftw.3c
143 fwide.3c
144 fwprintf.3c
145 fwrite.3c
146 fwscanf.3c
147 getcuid.3c
148 getcwd.3c
149 getdate.3c
150 getdtablesize.3c
151 getenv.3c
152 getexecname.3c
153 getgrnam.3c
154 gethostid.3c
155 gethostname.3c
156 gethrtime.3c
157 getline.3c
158 getloadavg.3c
159 getlogin.3c
160 getmntent.3c
161 getnetgrent.3c
162 getopt.3c
163 getpagesize.3c
164 getpagesizes.3c
165 getpass.3c
166 getpeercred.3c
167 getpriority.3c
168 getpw.3c
169 getpwnam.3c
170 gettrusage.3c
171 gets.3c
172 getspnam.3c
173 getsubopt.3c
174 gettext.3c
175 gettimeofday.3c
176 gettxt.3c
177 getusershell.3c
178 getutent.3c
179 getutxent.3c
180 getvfsent.3c
181 getwc.3c
182 getwchar.3c
183 getwd.3c
184 getwidth.3c
185 getws.3c
186 getzoneid.3c
187 glob.3c
188 grantpt.3c
189 hsearch.3c
190 iconv.3c
191 iconv_close.3c

```

```

192 iconv_open.3c
193 imaxabs.3c
194 imaxdiv.3c
195 index.3c
196 initgroups.3c
197 insque.3c
198 is_system_labeled.3c
199 isaexec.3c
200 isastream.3c
201 isatty.3c
202 isnand.3c
203 iswalph.3c
204 iswctype.3c
205 killpg.3c
206 lckpddf.3c
207 lfmt.3c
208 lio_listio.3c
209 localeconv.3c
210 lockf.3c
211 lsearch.3c
212 madvise.3c
213 makecontext.3c
214 makedev.3c
215 malloc.3c
216 mblen.3c
217 mbrlen.3c
218 mbrtowc.3c
219 mbsinit.3c
220 mbsrtowcs.3c
221 mbtowc.3c
222 membar_ops.3c
223 memory.3c
224 mkfifo.3c
225 mkstemp.3c
226 mktemp.3c
227 mktime.3c
228 mlock.3c
229 mlockall.3c
230 monitor.3c
231 mq_close.3c
232 mq_getattr.3c
233 mq_notify.3c
234 mq_open.3c
235 mq_receive.3c
236 mq_send.3c
237 mq_setattr.3c
238 mq_unlink.3c
239 msync.3c
240 mutex_init.3c
241 nanosleep.3c
242 ndbm.3c
243 newlocale.3c
244 nl_langinfo.3c
245 offsetof.3c
246 opendir.3c
247 perror.3c
248 pfmt.3c
249 plock.3c
250 popen.3c
251 port_alert.3c
252 port_associate.3c
253 port_create.3c
254 port_get.3c
255 port_send.3c
256 posix_fadvise.3c
257 posix_fallocate.3c

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```

258     posix_madvise.3c
259     posix_memalign.3c
260     posix_openpt.3c
261     posix_spawn.3c
262     posix_spawn_file_actions_addclose.3c
263     posix_spawn_file_actions_addclosefrom_np.3c
264     posix_spawn_file_actions_adddup2.3c
265     posix_spawn_file_actions_destroy.3c
266     posix_spawn_pipe_np.3c
267     posix_spawnattr_destroy.3c
268     posix_spawnattr_getflags.3c
269     posix_spawnattr_getpgroup.3c
270     posix_spawnattr_getschedparam.3c
271     posix_spawnattr_getschedpolicy.3c
272     posix_spawnattr_getsigdefault.3c
273     posix_spawnattr_getsigignore_np.3c
274     posix_spawnattr_getsigmask.3c
275     printf.3c
276     priv_addset.3c
277     priv_set.3c
278     priv_str_to_set.3c
279     pset_getloadavg.3c
280     psignal.3c
281     pthread_atfork.3c
282     pthread_attr_getdetachstate.3c
283     pthread_attr_getguardsize.3c
284     pthread_attr_getinheritsched.3c
285     pthread_attr_getschedparam.3c
286     pthread_attr_getschedpolicy.3c
287     pthread_attr_getscope.3c
288     pthread_attr_getstack.3c
289     pthread_attr_getstackaddr.3c
290     pthread_attr_getstacksize.3c
291     pthread_attr_init.3c
292     pthread_barrier_destroy.3c
293     pthread_barrier_wait.3c
294     pthread_barrierattr_destroy.3c
295     pthread_barrierattr_getpshared.3c
296     pthread_cancel.3c
297     pthread_cleanup_pop.3c
298     pthread_cleanup_push.3c
299     pthread_cond_init.3c
300     pthread_cond_signal.3c
301     pthread_cond_wait.3c
302     pthread_condattr_getclock.3c
303     pthread_condattr_getpshared.3c
304     pthread_condattr_init.3c
305     pthread_create.3c
306     pthread_detach.3c
307     pthread_equal.3c
308     pthread_exit.3c
309     pthread_getconcurrency.3c
310     pthread_getschedparam.3c
311     pthread_getspecific.3c
312     pthread_join.3c
313     pthread_key_create.3c
314     pthread_key_delete.3c
315     pthread_kill.3c
316     pthread_mutex_getprioceiling.3c
317     pthread_mutex_init.3c
318     pthread_mutex_lock.3c
319     pthread_mutex_timedlock.3c
320     pthread_mutexattr_getprioceiling.3c
321     pthread_mutexattr_getprotocol.3c
322     pthread_mutexattr_getpshared.3c
323     pthread_mutexattr_gettype.3c

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324     pthread_mutexattr_init.3c
325     pthread_once.3c
326     pthread_rwlock_init.3c
327     pthread_rwlock_rdlock.3c
328     pthread_rwlock_timedrdlock.3c
329     pthread_rwlock_timedwrlock.3c
330     pthread_rwlock_unlock.3c
331     pthread_rwlock_wrlock.3c
332     pthread_rwlockattr_getpshared.3c
333     pthread_rwlockattr_init.3c
334     pthread_self.3c
335     pthread_setcancelstate.3c
336     pthread_setcanceltype.3c
337     pthread_setschedprio.3c
338     pthread_sigmask.3c
339     pthread_spin_destroy.3c
340     pthread_spin_lock.3c
341     pthread_spin_unlock.3c
342     pthread_testcancel.3c
343     ptrace.3c
344     ptsname.3c
345     putenv.3c
346     putpwent.3c
347     puts.3c
348     putspent.3c
349     putws.3c
350     qsort.3c
351     raise.3c
352     rand.3c
353     random.3c
354     rctl_walk.3c
355     rctlblk_set_value.3c
356     re_comp.3c
357     readdir.3c
358     realpath.3c
359     reboot.3c
360     regcmp.3c
361     regcomp.3c
362     remove.3c
363     rewind.3c
364     rewinddir.3c
365     rwlock.3c
366     scandir.3c
367     scanf.3c
368     sched_get_priority_max.3c
369     sched_getparam.3c
370     sched_getscheduler.3c
371     sched_rr_get_interval.3c
372     sched_setparam.3c
373     sched_setscheduler.3c
374     sched_yield.3c
375     schedctl_init.3c
376     seekdir.3c
377     select.3c
378     sem_close.3c
379     sem_destroy.3c
380     sem_getvalue.3c
381     sem_init.3c
382     sem_open.3c
383     sem_post.3c
384     sem_timedwait.3c
385     sem_unlink.3c
386     sem_wait.3c
387     semaphore.3c
388     setbuf.3c
389     setbuffer.3c

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390      setcat.3c
391      setenv.3c
392      setjmp.3c
393      setkey.3c
394      setlabel.3c
395      setlocale.3c
396      shm_open.3c
397      shm_unlink.3c
398      sigfpe.3c
399      siginterrupt.3c
400      signal.3c
401      sigqueue.3c
402      sigsetops.3c
403      sigstack.3c
404      sigwaitinfo.3c
405      sleep.3c
406      ssignal.3c
407      stack_getbounds.3c
408      stack_inbounds.3c
409      stack_setbounds.3c
410      stack_violation.3c
411      stdio.3c
412      str2sig.3c
413      strcoll.3c
414      strerror.3c
415      strfmon.3c
416      strftime.3c
417      string.3c
418      string_to_decimal.3c
419      strptime.3c
420      strsignal.3c
421      strtod.3c
422      strtoint.3c
423      strtol.3c
424      strtoul.3c
425      strtows.3c
426      strxfrm.3c
427      swab.3c
428      sync_instruction_memory.3c
429      sysconf.3c
430      syslog.3c
431      system.3c
432      todrain.3c
433      toflow.3c
434      toflush.3c
435      togetattr.3c
436      togetpgrp.3c
437      togetsid.3c
438      tosendbreak.3c
439      tosetattr.3c
440      tosetpgrp.3c
441      tell.3c
442      telldir.3c
443      termios.3c
444      thr_create.3c
445      thr_exit.3c
446      thr_getconcurrency.3c
447      thr_getprio.3c
448      thr_join.3c
449      thr_keycreate.3c
450      thr_kill.3c
451      thr_main.3c
452      thr_min_stack.3c
453      thr_self.3c
454      thr_sigsetmask.3c
455      thr_stksegment.3c

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```

456      thr_suspend.3c
457      thr_yield.3c
458      timer_create.3c
459      timer_delete.3c
460      timer_settime.3c
461      timeradd.3c
462      tmpfile.3c
463      tmpnam.3c
464      toascii.3c
465      tolower.3c
466      toupper.3c
467      tolower.3c
468      towupper.3c
469      truncate.3c
470      tsearch.3c
471      ttyname.3c
472      ttyslot.3c
473      u8_strcmp.3c
474      u8_textprep_str.3c
475      u8_validate.3c
476      ualarm.3c
477      uconv_ul6tou32.3c
478      ucred_get.3c
479      ungetc.3c
480      ungetwc.3c
481      unlockpt.3c
482      unsetenv.3c
483      uselocale.3c
484      usleep.3c
485      vfwprintf.3c
486      vlfmt.3c
487      vpfmt.3c
488      vprintf.3c
489      vsyslog.3c
490      wait.3c
491      wait3.3c
492      waitpid.3c
493      walkcontext.3c
494      wctomb.3c
495      wscasecmp.3c
496      wscoll.3c
497      wcsdup.3c
498      wcsftime.3c
499      wcslen.3c
500      wcsrtombs.3c
501      wcsstr.3c
502      wcstod.3c
503      wcstoimax.3c
504      wcstol.3c
505      wcstoul.3c
506      wcstring.3c
507      wcswidth.3c
508      wcsxfrm.3c
509      wctob.3c
510      wctomb.3c
511      wctrans.3c
512      wctype.3c
513      wcwidth.3c
514      wmemchr.3c
515      wmemcmp.3c
516      wmemcpy.3c
517      wmemmove.3c
518      wmemset.3c
519      wordexp.3c
520      wsprintf.3c
521      wsscanf.3c

```



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522      wstring.3c      \
524  MANLINKS=      FD_CLR.3c      \
525                FD_ISSET.3c      \
526                FD_SET.3c      \
527                FD_ZERO.3c      \
528                _flbf.3c      \
529                _fpending.3c      \
530                _fpurge.3c      \
531                _freadable.3c      \
532                _freading.3c      \
533                _fsetlocking.3c      \
534                _fwritable.3c      \
535                _fwriting.3c      \
536                _edata.3c      \
537                _end.3c      \
538                _etext.3c      \
539                _exithandle.3c      \
540                _flushlbf.3c      \
541                _setjmp.3c      \
542                addrtosymstr.3c      \
543                aiowrite.3c      \
544                alloca.3c      \
545                alphasort.3c      \
546                ascftime.3c      \
547                asctime.3c      \
548                asctime_r.3c      \
549                asprintf.3c      \
550                atof.3c      \
551                atoi.3c      \
552                atol.3c      \
553                atoll.3c      \
554                atomic_add_16.3c      \
555                atomic_add_16_nv.3c      \
556                atomic_add_32.3c      \
557                atomic_add_32_nv.3c      \
558                atomic_add_64.3c      \
559                atomic_add_64_nv.3c      \
560                atomic_add_8.3c      \
561                atomic_add_8_nv.3c      \
562                atomic_add_char.3c      \
563                atomic_add_char_nv.3c      \
564                atomic_add_int.3c      \
565                atomic_add_int_nv.3c      \
566                atomic_add_long.3c      \
567                atomic_add_long_nv.3c      \
568                atomic_add_ptr.3c      \
569                atomic_add_ptr_nv.3c      \
570                atomic_add_short.3c      \
571                atomic_add_short_nv.3c      \
572                atomic_and_16.3c      \
573                atomic_and_16_nv.3c      \
574                atomic_and_32.3c      \
575                atomic_and_32_nv.3c      \
576                atomic_and_64.3c      \
577                atomic_and_64_nv.3c      \
578                atomic_and_8.3c      \
579                atomic_and_8_nv.3c      \
580                atomic_and_uchar.3c      \
581                atomic_and_uchar_nv.3c      \
582                atomic_and_uint.3c      \
583                atomic_and_uint_nv.3c      \
584                atomic_and_ulong.3c      \
585                atomic_and_ulong_nv.3c      \
586                atomic_and_ushort.3c      \
587                atomic_and_ushort_nv.3c

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588                atomic_cas_16.3c      \
589                atomic_cas_32.3c      \
590                atomic_cas_64.3c      \
591                atomic_cas_8.3c      \
592                atomic_cas_ptr.3c      \
593                atomic_cas_uchar.3c      \
594                atomic_cas_uint.3c      \
595                atomic_cas_ulong.3c      \
596                atomic_cas_ushort.3c      \
597                atomic_clear_long_excl.3c      \
598                atomic_dec_16.3c      \
599                atomic_dec_16_nv.3c      \
600                atomic_dec_32.3c      \
601                atomic_dec_32_nv.3c      \
602                atomic_dec_64.3c      \
603                atomic_dec_64_nv.3c      \
604                atomic_dec_8.3c      \
605                atomic_dec_8_nv.3c      \
606                atomic_dec_ptr.3c      \
607                atomic_dec_ptr_nv.3c      \
608                atomic_dec_uchar.3c      \
609                atomic_dec_uchar_nv.3c      \
610                atomic_dec_uint.3c      \
611                atomic_dec_uint_nv.3c      \
612                atomic_dec_ulong.3c      \
613                atomic_dec_ulong_nv.3c      \
614                atomic_dec_ushort.3c      \
615                atomic_dec_ushort_nv.3c      \
616                atomic_inc_16.3c      \
617                atomic_inc_16_nv.3c      \
618                atomic_inc_32.3c      \
619                atomic_inc_32_nv.3c      \
620                atomic_inc_64.3c      \
621                atomic_inc_64_nv.3c      \
622                atomic_inc_8.3c      \
623                atomic_inc_8_nv.3c      \
624                atomic_inc_ptr.3c      \
625                atomic_inc_ptr_nv.3c      \
626                atomic_inc_uchar.3c      \
627                atomic_inc_uchar_nv.3c      \
628                atomic_inc_uint.3c      \
629                atomic_inc_uint_nv.3c      \
630                atomic_inc_ulong.3c      \
631                atomic_inc_ulong_nv.3c      \
632                atomic_inc_ushort.3c      \
633                atomic_inc_ushort_nv.3c      \
634                atomic_or_16.3c      \
635                atomic_or_16_nv.3c      \
636                atomic_or_32.3c      \
637                atomic_or_32_nv.3c      \
638                atomic_or_64.3c      \
639                atomic_or_64_nv.3c      \
640                atomic_or_8.3c      \
641                atomic_or_8_nv.3c      \
642                atomic_or_uchar.3c      \
643                atomic_or_uchar_nv.3c      \
644                atomic_or_uint.3c      \
645                atomic_or_uint_nv.3c      \
646                atomic_or_ulong.3c      \
647                atomic_or_ulong_nv.3c      \
648                atomic_or_ushort.3c      \
649                atomic_or_ushort_nv.3c      \
650                atomic_set_long_excl.3c      \
651                atomic_swap_16.3c      \
652                atomic_swap_32.3c      \
653                atomic_swap_64.3c

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654         atomic_swap_8.3c      \
655         atomic_swap_ptr.3c     \
656         atomic_swap_uchar.3c   \
657         atomic_swap_uint.3c    \
658         atomic_swap_ulong.3c   \
659         atomic_swap_ushort.3c  \
660         backtrace.3c           \
661         backtrace_symbols.3c    \
662         backtrace_symbols_fd.3c \
663         bcmp.3c                \
664         bcopy.3c               \
665         bind_textdomain_codeset.3c \
666         bindtextdomain.3c       \
667         btowc_l.3c              \
668         bzero.3c               \
669         calloc.3c              \
670         catclose.3c            \
671         cfgetospeed.3c         \
672         cfsetospeed.3c         \
673         cftime.3c              \
674         clearerr.3c            \
675         clock_getres.3c        \
676         clock_gettime.3c       \
677         closelog.3c            \
678         cond_broadcast.3c      \
679         cond_destroy.3c        \
680         cond_reltimedwait.3c   \
681         cond_signal.3c         \
682         cond_timedwait.3c      \
683         cond_wait.3c           \
684         csetcol.3c             \
685         csetlen.3c             \
686         csetno.3c              \
687         ctermid_r.3c           \
688         ctime_r.3c             \
689         dbm_clearerr.3c        \
690         dbm_close.3c           \
691         dbm_delete.3c          \
692         dbm_error.3c           \
693         dbm_fetch.3c           \
694         dbm_firstkey.3c        \
695         dbm_nextkey.3c         \
696         dbm_open.3c            \
697         dbm_store.3c           \
698         dcgettext.3c           \
699         dcngettext.3c          \
700         decimal_to_double.3c    \
701         decimal_to_extended.3c  \
702         decimal_to_quadruple.3c \
703         decimal_to_single.3c   \
704         dgettext.3c            \
705         dladdr1.3c             \
706         dlmopen.3c             \
707         dngettext.3c           \
708         door_setparam.3c       \
709         door_unbind.3c         \
710         double_to_decimal.3c   \
711         dup3.3c                \
712         duplocale.3c           \
713         edata.3c               \
714         endgrent.3c            \
715         endnetgrent.3c         \
716         endpwent.3c           \
717         endspent.3c            \
718         endusershell.3c        \
719         endutent.3c           \

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```

720         endutxent.3c          \
721         erand48.3c             \
722         errno.3c               \
723         errx.3c                \
724         etext.3c               \
725         euccol.3c              \
726         eucscol.3c             \
727         extended_to_decimal.3c \
728         fconvert.3c            \
729         fcvt.3c                \
730         fdopendir.3c           \
731         fdwalk.3c              \
732         feof.3c                \
733         fgetgrent.3c           \
734         fgetgrent_r.3c         \
735         fgetpwent.3c           \
736         fgetpwent_r.3c         \
737         fgets.3c               \
738         fgetspent.3c           \
739         fgetspent_r.3c         \
740         fgetwc_l.3c            \
741         fgetws.3c              \
742         file_to_decimal.3c     \
743         fileno.3c              \
744         finite.3c              \
745         fpclass.3c             \
746         fpgetmask.3c           \
747         fpgetsticky.3c         \
748         fprintf.3c             \
749         fpsetmask.3c           \
750         fpsetround.3c          \
751         fpsetsticky.3c         \
752         fputs.3c               \
753         free.3c                \
754         freelocale.3c          \
755         fscanf.3c              \
756         fseeko.3c              \
757         fsetattr.3c            \
758         ftello.3c              \
759         ftruncate.3c           \
760         ftrylockfile.3c        \
761         func_to_decimal.3c     \
762         funlockfile.3c         \
763         gconvert.3c            \
764         gcvt.3c                \
765         getatrat.3c            \
766        getc.3c                 \
767         getc_unlocked.3c       \
768         getchar.3c             \
769         getchar_unlocked.3c    \
770         getdelim.3c            \
771         getextmntent.3c        \
772         getgrent.3c            \
773         getgrent_r.3c          \
774         getgrgid.3c            \
775         getgrgid_r.3c          \
776         getgrnam_r.3c          \
777         gethomedir.3c          \
778         gethrvtime.3c          \
779         getlogin_r.3c          \
780         getmntany.3c           \
781         getnetgrent_r.3c       \
782         getpassphrase.3c       \
783         getpwent.3c            \
784         getpwent_r.3c          \
785         getpwnam_r.3c          \

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786      getpwuid.3c
787      getpwuid_r.3c
788      getspent.3c
789      getspent_r.3c
790      getspnam_r.3c
791      getutid.3c
792      getutline.3c
793      getutmp.3c
794      getutmpx.3c
795      getutxid.3c
796      getutxline.3c
797      getvfsany.3c
798      getvfsfile.3c
799      getvfsspec.3c
800      getw.3c
801      getwc_l.3c
802      getwchar_l.3c
803      getzoneidbyname.3c
804      getzonenamebyid.3c
805      globfree.3c
806      gmtime.3c
807      gmtime_r.3c
808      gsignal.3c
809      hasmntopt.3c
810      hcreate.3c
811      hdestroy.3c
812      initstate.3c
813      innetgr.3c
814      isalnum.3c
815      isalnum_l.3c
816      isalpha.3c
817      isalpha_l.3c
818      isascii.3c
819      isblank.3c
820      isblank_l.3c
821      iscntrl.3c
822      iscntrl_l.3c
823      isdigit.3c
824      isdigit_l.3c
825      isenglish.3c
826      isgraph.3c
827      isgraph_l.3c
828      isideogram.3c
829      islower.3c
830      islower_l.3c
831      isnanf.3c
832      isnumber.3c
833      isphonogram.3c
834      isprint.3c
835      isprint_l.3c
836      ispunct.3c
837      ispunct_l.3c
838      isspace.3c
839      isspace_l.3c
840      isspecial.3c
841      isupper.3c
842      isupper_l.3c
843      iswalnum.3c
844      iswalnum_l.3c
845      iswalpha_l.3c
846      iswascii.3c
847      iswblank.3c
848      iswblank_l.3c
849      iswcntrl.3c
850      iswcntrl_l.3c
851      iswctype_l.3c

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```

852      iswdigit.3c
853      iswdigit_l.3c
854      iswgraph.3c
855      iswgraph_l.3c
856      iswideogram.3c
857      iswideogram_l.3c
858      iswhexnumber.3c
859      iswhexnumber_l.3c
860      iswlower.3c
861      iswlower_l.3c
862      iswnumber.3c
863      iswnumber_l.3c
864      iswphonogram.3c
865      iswphonogram_l.3c
866      iswprint.3c
867      iswprint_l.3c
868      iswpunct.3c
869      iswpunct_l.3c
870      iswspace.3c
871      iswspace_l.3c
872      iswspecial.3c
873      iswspecial_l.3c
874      iswupper.3c
875      iswupper_l.3c
876      iswxdigit.3c
877      iswxdigit_l.3c
878      isxdigit.3c
879      isxdigit_l.3c
880      jrand48.3c
881      l64a.3c
882      labs.3c
883      lcong48.3c
884      ldiv.3c
885      lfind.3c
886      llabs.3c
887      lldiv.3c
888      lltostr.3c
889      localtime.3c
890      localtime_r.3c
891      longjmp.3c
892      lrand48.3c
893      major.3c
894      mblen_l.3c
895      mbrlen_l.3c
896      mbrtowc_l.3c
897      mbsinit_l.3c
898      mbsnrtowcs.3c
899      mbsnrtowcs_l.3c
900      mbsrtowcs_l.3c
901      mbstowcs.3c
902      mbstowcs_l.3c
903      mbtowc_l.3c
904      memalign.3c
905      membar_consumer.3c
906      membar_enter.3c
907      membar_exit.3c
908      membar_producer.3c
909      memccpy.3c
910      memchr.3c
911      memcmp.3c
912      memcpy.3c
913      memmove.3c
914      memset.3c
915      minor.3c
916      mkdtemp.3c
917      mkostemp.3c

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918      mkostemps.3c      \
919      mkstemps.3c      \
920      mq_reltimedreceive_np.3c \
921      mq_reltimedsend_np.3c \
922      mq_timedreceive.3c \
923      mq_timedsend.3c \
924      mrand48.3c \
925      munlock.3c \
926      munlockall.3c \
927      mutex_consistent.3c \
928      mutex_destroy.3c \
929      mutex_lock.3c \
930      mutex_trylock.3c \
931      mutex_unlock.3c \
932      nl_langinfo_l.3c \
933      nftw.3c \
934      ngettext.3c \
935      nrand48.3c \
936      openlog.3c \
937      pclose.3c \
938      port_dissociate.3c \
939      port_getn.3c \
940      port_sendn.3c \
941      posix_spawn_file_actions_addopen.3c \
942      posix_spawn_file_actions_init.3c \
943      posix_spawnattr_init.3c \
944      posix_spawnattr_setflags.3c \
945      posix_spawnattr_setpgroup.3c \
946      posix_spawnattr_setschedparam.3c \
947      posix_spawnattr_setschedpolicy.3c \
948      posix_spawnattr_setsigdefault.3c \
949      posix_spawnattr_setsigignore_np.3c \
950      posix_spawnattr_setsigmask.3c \
951      posix_spawnnp.3c \
952      printstack.3c \
953      priv_allocset.3c \
954      priv_basicset.3c \
955      priv_copysset.3c \
956      priv_delset.3c \
957      priv_emptyset.3c \
958      priv_fillset.3c \
959      priv_freerset.3c \
960      priv_getbyname.3c \
961      priv_getbynum.3c \
962      priv_getsetbyname.3c \
963      priv_getsetbynum.3c \
964      priv_gettext.3c \
965      priv_ineffect.3c \
966      priv_intersect.3c \
967      priv_inverse.3c \
968      priv_isemptyset.3c \
969      priv_isequalset.3c \
970      priv_isfullset.3c \
971      priv_ismember.3c \
972      priv_issubset.3c \
973      priv_set_to_str.3c \
974      priv_union.3c \
975      pselect.3c \
976      psiginfo.3c \
977      pthread_attr_destroy.3c \
978      pthread_attr_setdetachstate.3c \
979      pthread_attr_setguardsize.3c \
980      pthread_attr_setinheritsched.3c \
981      pthread_attr_setschedparam.3c \
982      pthread_attr_setschedpolicy.3c \
983      pthread_attr_setscope.3c \

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```

984      pthread_attr_setstack.3c \
985      pthread_attr_setstackaddr.3c \
986      pthread_attr_setstacksize.3c \
987      pthread_barrier_init.3c \
988      pthread_barrierattr_init.3c \
989      pthread_barrierattr_setpshared.3c \
990      pthread_cond_broadcast.3c \
991      pthread_cond_destroy.3c \
992      pthread_cond_reltimedwait_np.3c \
993      pthread_cond_timedwait.3c \
994      pthread_condattr_destroy.3c \
995      pthread_condattr_setclock.3c \
996      pthread_condattr_setpshared.3c \
997      pthread_key_create_once_np.3c \
998      pthread_mutex_destroy.3c \
999      pthread_mutex_reltimedlock_np.3c \
1000      pthread_mutex_setprioceiling.3c \
1001      pthread_mutex_trylock.3c \
1002      pthread_mutex_unlock.3c \
1003      pthread_mutexattr_destroy.3c \
1004      pthread_mutexattr_setprioceiling.3c \
1005      pthread_mutexattr_setprotocol.3c \
1006      pthread_mutexattr_setpshared.3c \
1007      pthread_mutexattr_settype.3c \
1008      pthread_rwlock_destroy.3c \
1009      pthread_rwlock_reltimedrdlock_np.3c \
1010      pthread_rwlock_reltimedwrlock_np.3c \
1011      pthread_rwlock_tryrdlock.3c \
1012      pthread_rwlock_trywrlock.3c \
1013      pthread_rwlockattr_destroy.3c \
1014      pthread_rwlockattr_setpshared.3c \
1015      pthread_setconcurrency.3c \
1016      pthread_setschedparam.3c \
1017      pthread_setspecific.3c \
1018      pthread_spin_init.3c \
1019      pthread_spin_trylock.3c \
1020      putc.3c \
1021      putc_unlocked.3c \
1022      putchar.3c \
1023      putchar_unlocked.3c \
1024      putmntent.3c \
1025      pututline.3c \
1026      pututxline.3c \
1027      putw.3c \
1028      putwc.3c \
1029      putwchar.3c \
1030      qeconvert.3c \
1031      qfconvert.3c \
1032      qgconvert.3c \
1033      quadruple_to_decimal.3c \
1034      rand_r.3c \
1035      rctlblk_get_enforced_value.3c \
1036      rctlblk_get_firing_time.3c \
1037      rctlblk_get_global_action.3c \
1038      rctlblk_get_global_flags.3c \
1039      rctlblk_get_local_action.3c \
1040      rctlblk_get_local_flags.3c \
1041      rctlblk_get_privilege.3c \
1042      rctlblk_get_recipient_pid.3c \
1043      rctlblk_get_value.3c \
1044      rctlblk_set_local_action.3c \
1045      rctlblk_set_local_flags.3c \
1046      rctlblk_set_privilege.3c \
1047      rctlblk_set_recipient_pid.3c \
1048      rctlblk_size.3c \
1049      re_exec.3c \

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```

1050      readdir_r.3c      \
1051      realloc.3c        \
1052      regerror.3c       \
1053      regex.3c          \
1054      regexec.3c        \
1055      regfree.3c        \
1056      remque.3c         \
1057      resetmnttab.3c    \
1058      rindex.3c         \
1059      rw_rdlock.3c      \
1060      rw_tryrdlock.3c   \
1061      rw_trywrlock.3c   \
1062      rw_unlock.3c      \
1063      rw_wlock.3c       \
1064      rwlock_destroy.3c \
1065      rwlock_init.3c    \
1066      sched_get_priority_min.3c \
1067      schedctl_exit.3c  \
1068      schedctl_lookup.3c \
1069      schedctl_start.3c \
1070      schedctl_stop.3c  \
1071      seconvert.3c      \
1072      seed48.3c         \
1073      sem_reltimedwait_np.3c \
1074      sem_trywait.3c    \
1075      sema_destroy.3c   \
1076      sema_init.3c      \
1077      sema_post.3c      \
1078      sema_trywait.3c   \
1079      sema_wait.3c      \
1080      setattrrat.3c     \
1081      setgrent.3c       \
1082      sethostname.3c    \
1083      setlinebuf.3c     \
1084      setlogmask.3c     \
1085      setnetgrent.3c    \
1086      setpriority.3c    \
1087      setpwent.3c       \
1088      setspent.3c       \
1089      setstate.3c       \
1090      settimeofday.3c   \
1091      setusershell.3c   \
1092      setutent.3c       \
1093      setutxent.3c      \
1094      setvbuf.3c        \
1095      sfconvert.3c      \
1096      sgconvert.3c      \
1097      sig2str.3c        \
1098      sigaddset.3c      \
1099      sigdelset.3c      \
1100      sigemptyset.3c    \
1101      sigfillset.3c     \
1102      sighold.3c        \
1103      sigignore.3c      \
1104      sigismember.3c     \
1105      siglongjmp.3c     \
1106      sigpause.3c       \
1107      sigrelse.3c       \
1108      sigset.3c         \
1109      sigsetjmp.3c      \
1110      sigtimedwait.3c   \
1111      single_to_decimal.3c \
1112      snprintf.3c       \
1113      sprintf.3c        \
1114      srand.3c          \
1115      srand48.3c        \

```

```

1116      srandom.3c        \
1117      sscanf.3c         \
1118      stderr.3c         \
1119      stdin.3c          \
1120      stdout.3c         \
1121      strcasecmp.3c      \
1122      strcasecmp_l.3c    \
1123      strcat.3c         \
1124      strchr.3c         \
1125      strcmp.3c         \
1126      strcoll_l.3c      \
1127      strcpy.3c         \
1128      strcspn.3c        \
1129      strdup.3c         \
1130      strerror_r.3c     \
1131      strfmon_l.3c      \
1132      strftime_l.3c     \
1133      strlcat.3c        \
1134      strlcpy.3c        \
1135      strlen.3c         \
1136      strncasecmp.3c    \
1137      strncasecmp_l.3c  \
1138      strncat.3c        \
1139      strncmp.3c        \
1140      strncpy.3c        \
1141      strnlen.3c        \
1142      strpbrk.3c        \
1143      strptime_l.3c     \
1144      strrchr.3c        \
1145      strsep.3c         \
1146      strspn.3c         \
1147      strstr.3c         \
1148      strtod.3c         \
1149      strtok.3c         \
1150      strtok_r.3c       \
1151      strtold.3c        \
1152      strtoll.3c        \
1153      strtoull.3c       \
1154      strtoumax.3c      \
1155      strxfrm_l.3c      \
1156      swapcontext.3c    \
1157      swprintf.3c       \
1158      swscanf.3c        \
1159      tdelete.3c        \
1160      tempnam.3c        \
1161      textdomain.3c     \
1162      tfind.3c          \
1163      thr_continue.3c    \
1164      thr_getspecific.3c \
1165      thr_keycreate_once.3c \
1166      thr_setconcurrency.3c \
1167      thr_setprio.3c     \
1168      thr_setspecific.3c \
1169      timer_getoverrun.3c \
1170      timer_gettime.3c   \
1171      timerclear.3c      \
1172      timercmp.3c        \
1173      timerisset.3c     \
1174      timersub.3c        \
1175      tmpnam_r.3c       \
1176      tolower_l.3c      \
1177      toupper_l.3c      \
1178      towctrans.3c      \
1179      towctrans_l.3c    \
1180      tolower_l.3c      \
1181      toupper_l.3c      \

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20

```

1313 llabs.3c                := LINKSRC = abs.3c
1315 aiowrite.3c             := LINKSRC = aioread.3c
1317 atomic_add_16.3c         := LINKSRC = atomic_add.3c
1318 atomic_add_16_nv.3c      := LINKSRC = atomic_add.3c
1319 atomic_add_32.3c         := LINKSRC = atomic_add.3c
1320 atomic_add_32_nv.3c      := LINKSRC = atomic_add.3c
1321 atomic_add_64.3c         := LINKSRC = atomic_add.3c
1322 atomic_add_64_nv.3c      := LINKSRC = atomic_add.3c
1323 atomic_add_8.3c          := LINKSRC = atomic_add.3c
1324 atomic_add_8_nv.3c       := LINKSRC = atomic_add.3c
1325 atomic_add_char.3c       := LINKSRC = atomic_add.3c
1326 atomic_add_char_nv.3c   := LINKSRC = atomic_add.3c
1327 atomic_add_int.3c        := LINKSRC = atomic_add.3c
1328 atomic_add_int_nv.3c     := LINKSRC = atomic_add.3c
1329 atomic_add_long.3c       := LINKSRC = atomic_add.3c
1330 atomic_add_long_nv.3c    := LINKSRC = atomic_add.3c
1331 atomic_add_ptr.3c        := LINKSRC = atomic_add.3c
1332 atomic_add_ptr_nv.3c     := LINKSRC = atomic_add.3c
1333 atomic_add_short.3c      := LINKSRC = atomic_add.3c
1334 atomic_add_short_nv.3c   := LINKSRC = atomic_add.3c
1335 atomic_and_16.3c         := LINKSRC = atomic_and.3c
1336 atomic_and_16_nv.3c     := LINKSRC = atomic_and.3c
1337 atomic_and_32.3c        := LINKSRC = atomic_and.3c
1338 atomic_and_32_nv.3c     := LINKSRC = atomic_and.3c
1339 atomic_and_64.3c        := LINKSRC = atomic_and.3c
1340 atomic_and_64_nv.3c     := LINKSRC = atomic_and.3c
1341 atomic_and_8.3c         := LINKSRC = atomic_and.3c
1342 atomic_and_8_nv.3c      := LINKSRC = atomic_and.3c
1343 atomic_and_uchar.3c     := LINKSRC = atomic_and.3c
1344 atomic_and_uchar_nv.3c  := LINKSRC = atomic_and.3c
1345 atomic_and_uint.3c      := LINKSRC = atomic_and.3c
1346 atomic_and_uint_nv.3c   := LINKSRC = atomic_and.3c
1347 atomic_and_ulong.3c     := LINKSRC = atomic_and.3c
1348 atomic_and_ulong_nv.3c  := LINKSRC = atomic_and.3c
1349 atomic_and_ushort.3c    := LINKSRC = atomic_and.3c
1350 atomic_and_ushort_nv.3c := LINKSRC = atomic_and.3c
1352 atomic_clear_long_excl.3c := LINKSRC = atomic_bits.3c
1353 atomic_set_long_excl.3c  := LINKSRC = atomic_bits.3c
1355 atomic_cas_16.3c        := LINKSRC = atomic_cas.3c
1356 atomic_cas_32.3c        := LINKSRC = atomic_cas.3c
1357 atomic_cas_64.3c        := LINKSRC = atomic_cas.3c
1358 atomic_cas_8.3c         := LINKSRC = atomic_cas.3c
1359 atomic_cas_ptr.3c       := LINKSRC = atomic_cas.3c
1360 atomic_cas_uchar.3c     := LINKSRC = atomic_cas.3c
1361 atomic_cas_uint.3c      := LINKSRC = atomic_cas.3c
1362 atomic_cas_ulong.3c     := LINKSRC = atomic_cas.3c
1363 atomic_cas_ushort.3c    := LINKSRC = atomic_cas.3c
1365 atomic_dec_16.3c        := LINKSRC = atomic_dec.3c
1366 atomic_dec_16_nv.3c     := LINKSRC = atomic_dec.3c
1367 atomic_dec_32.3c        := LINKSRC = atomic_dec.3c
1368 atomic_dec_32_nv.3c     := LINKSRC = atomic_dec.3c
1369 atomic_dec_64.3c        := LINKSRC = atomic_dec.3c
1370 atomic_dec_64_nv.3c     := LINKSRC = atomic_dec.3c
1371 atomic_dec_8.3c         := LINKSRC = atomic_dec.3c
1372 atomic_dec_8_nv.3c      := LINKSRC = atomic_dec.3c
1373 atomic_dec_ptr.3c       := LINKSRC = atomic_dec.3c
1374 atomic_dec_ptr_nv.3c    := LINKSRC = atomic_dec.3c
1375 atomic_dec_uchar.3c     := LINKSRC = atomic_dec.3c
1376 atomic_dec_uchar_nv.3c := LINKSRC = atomic_dec.3c
1377 atomic_dec_uint.3c      := LINKSRC = atomic_dec.3c
1378 atomic_dec_uint_nv.3c   := LINKSRC = atomic_dec.3c

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1379 atomic_dec_ulong.3c     := LINKSRC = atomic_dec.3c
1380 atomic_dec_ulong_nv.3c  := LINKSRC = atomic_dec.3c
1381 atomic_dec_ushort.3c    := LINKSRC = atomic_dec.3c
1382 atomic_dec_ushort_nv.3c := LINKSRC = atomic_dec.3c
1384 atomic_inc_16.3c        := LINKSRC = atomic_inc.3c
1385 atomic_inc_16_nv.3c     := LINKSRC = atomic_inc.3c
1386 atomic_inc_32.3c        := LINKSRC = atomic_inc.3c
1387 atomic_inc_32_nv.3c     := LINKSRC = atomic_inc.3c
1388 atomic_inc_64.3c        := LINKSRC = atomic_inc.3c
1389 atomic_inc_64_nv.3c     := LINKSRC = atomic_inc.3c
1390 atomic_inc_8.3c         := LINKSRC = atomic_inc.3c
1391 atomic_inc_8_nv.3c      := LINKSRC = atomic_inc.3c
1392 atomic_inc_ptr.3c       := LINKSRC = atomic_inc.3c
1393 atomic_inc_ptr_nv.3c    := LINKSRC = atomic_inc.3c
1394 atomic_inc_uchar.3c     := LINKSRC = atomic_inc.3c
1395 atomic_inc_uchar_nv.3c  := LINKSRC = atomic_inc.3c
1396 atomic_inc_uint.3c      := LINKSRC = atomic_inc.3c
1397 atomic_inc_uint_nv.3c   := LINKSRC = atomic_inc.3c
1398 atomic_inc_ulong.3c     := LINKSRC = atomic_inc.3c
1399 atomic_inc_ulong_nv.3c  := LINKSRC = atomic_inc.3c
1400 atomic_inc_ushort.3c    := LINKSRC = atomic_inc.3c
1401 atomic_inc_ushort_nv.3c := LINKSRC = atomic_inc.3c
1403 atomic_or_16.3c         := LINKSRC = atomic_or.3c
1404 atomic_or_16_nv.3c     := LINKSRC = atomic_or.3c
1405 atomic_or_32.3c        := LINKSRC = atomic_or.3c
1406 atomic_or_32_nv.3c     := LINKSRC = atomic_or.3c
1407 atomic_or_64.3c        := LINKSRC = atomic_or.3c
1408 atomic_or_64_nv.3c     := LINKSRC = atomic_or.3c
1409 atomic_or_8.3c         := LINKSRC = atomic_or.3c
1410 atomic_or_8_nv.3c      := LINKSRC = atomic_or.3c
1411 atomic_or_uchar.3c     := LINKSRC = atomic_or.3c
1412 atomic_or_uchar_nv.3c  := LINKSRC = atomic_or.3c
1413 atomic_or_uint.3c      := LINKSRC = atomic_or.3c
1414 atomic_or_uint_nv.3c   := LINKSRC = atomic_or.3c
1415 atomic_or_ulong.3c     := LINKSRC = atomic_or.3c
1416 atomic_or_ulong_nv.3c  := LINKSRC = atomic_or.3c
1417 atomic_or_ushort.3c    := LINKSRC = atomic_or.3c
1418 atomic_or_ushort_nv.3c := LINKSRC = atomic_or.3c
1420 atomic_swap_16.3c       := LINKSRC = atomic_swap.3c
1421 atomic_swap_32.3c       := LINKSRC = atomic_swap.3c
1422 atomic_swap_64.3c      := LINKSRC = atomic_swap.3c
1423 atomic_swap_8.3c       := LINKSRC = atomic_swap.3c
1424 atomic_swap_ptr.3c     := LINKSRC = atomic_swap.3c
1425 atomic_swap_uchar.3c   := LINKSRC = atomic_swap.3c
1426 atomic_swap_uint.3c    := LINKSRC = atomic_swap.3c
1427 atomic_swap_ulong.3c   := LINKSRC = atomic_swap.3c
1428 atomic_swap_ushort.3c  := LINKSRC = atomic_swap.3c
1430 bcmp.3c                := LINKSRC = bstring.3c
1431 bcopy.3c                := LINKSRC = bstring.3c
1432 bzero.3c               := LINKSRC = bstring.3c
1434 btowc_l.3c             := LINKSRC = btowc.3c
1436 catclose.3c            := LINKSRC = catopen.3c
1438 cfgetospeed.3c         := LINKSRC = cfgetispeed.3c
1440 cfsetospeed.3c         := LINKSRC = cfsetispeed.3c
1442 clock_getres.3c        := LINKSRC = clock_settime.3c
1443 clock_gettime.3c       := LINKSRC = clock_settime.3c

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1445 fdwalk.3c                := LINKSRC = closefrom.3c

1447 cond_broadcast.3c        := LINKSRC = cond_init.3c
1448 cond_destroy.3c          := LINKSRC = cond_init.3c
1449 cond_reltimedwait.3c     := LINKSRC = cond_init.3c
1450 cond_signal.3c           := LINKSRC = cond_init.3c
1451 cond_timedwait.3c        := LINKSRC = cond_init.3c
1452 cond_wait.3c             := LINKSRC = cond_init.3c

1454 csetcol.3c                := LINKSRC = cset.3c
1455 csetlen.3c               := LINKSRC = cset.3c
1456 csetno.3c                := LINKSRC = cset.3c
1457 wcsetno.3c              := LINKSRC = cset.3c

1459 ctermid_r.3c             := LINKSRC = ctermid.3c

1461 asctime.3c               := LINKSRC = ctime.3c
1462 asctime_r.3c            := LINKSRC = ctime.3c
1463 ctime_r.3c              := LINKSRC = ctime.3c
1464 gmtime.3c              := LINKSRC = ctime.3c
1465 gmtime_r.3c            := LINKSRC = ctime.3c
1466 localtime.3c           := LINKSRC = ctime.3c
1467 localtime_r.3c        := LINKSRC = ctime.3c
1468 tzset.3c               := LINKSRC = ctime.3c

1470 isalnum.3c              := LINKSRC = ctype.3c
1471 isalnum_l.3c            := LINKSRC = ctype.3c
1472 isalpha.3c             := LINKSRC = ctype.3c
1473 isalpha_l.3c           := LINKSRC = ctype.3c
1474 isascii.3c             := LINKSRC = ctype.3c
1475 isblank.3c            := LINKSRC = ctype.3c
1476 isblank_l.3c          := LINKSRC = ctype.3c
1477 iscntrl.3c            := LINKSRC = ctype.3c
1478 iscntrl_l.3c          := LINKSRC = ctype.3c
1479 isdigit.3c            := LINKSRC = ctype.3c
1480 isdigit_l.3c          := LINKSRC = ctype.3c
1481 isgraph.3c            := LINKSRC = ctype.3c
1482 isgraph_l.3c         := LINKSRC = ctype.3c
1483 islower.3c            := LINKSRC = ctype.3c
1484 islower_l.3c         := LINKSRC = ctype.3c
1485 isprint.3c           := LINKSRC = ctype.3c
1486 isprint_l.3c         := LINKSRC = ctype.3c
1487 ispunct.3c          := LINKSRC = ctype.3c
1488 ispunct_l.3c         := LINKSRC = ctype.3c
1489 isspace.3c           := LINKSRC = ctype.3c
1490 isspace_l.3c         := LINKSRC = ctype.3c
1491 isupper.3c           := LINKSRC = ctype.3c
1492 isupper_l.3c         := LINKSRC = ctype.3c
1493 isxdigit.3c          := LINKSRC = ctype.3c
1494 isxdigit_l.3c       := LINKSRC = ctype.3c

1496 decimal_to_double.3c    := LINKSRC = decimal_to_floating.3c
1497 decimal_to_extended.3c  := LINKSRC = decimal_to_floating.3c
1498 decimal_to_quadruple.3c := LINKSRC = decimal_to_floating.3c
1499 decimal_to_single.3c    := LINKSRC = decimal_to_floating.3c

1501 ldiv.3c                 := LINKSRC = div.3c
1502 lldiv.3c              := LINKSRC = div.3c

1504 dladdr_l.3c           := LINKSRC = dladdr.3c

1506 dlmopen.3c           := LINKSRC = dlopen.3c

1508 door_unbind.3c        := LINKSRC = door_bind.3c

1510 door_setparam.3c     := LINKSRC = door_getparam.3c

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1512 erand48.3c            := LINKSRC = drand48.3c
1513 jrand48.3c            := LINKSRC = drand48.3c
1514 lcong48.3c            := LINKSRC = drand48.3c
1515 lrand48.3c            := LINKSRC = drand48.3c
1516 mrand48.3c           := LINKSRC = drand48.3c
1517 nrand48.3c           := LINKSRC = drand48.3c
1518 seed48.3c            := LINKSRC = drand48.3c
1519 srand48.3c           := LINKSRC = drand48.3c

1521 dup3.3c               := LINKSRC = dup2.3c

1523 fconvert.3c          := LINKSRC = econvert.3c
1524 gconvert.3c          := LINKSRC = econvert.3c
1525 qeconvert.3c         := LINKSRC = econvert.3c
1526 qfconvert.3c         := LINKSRC = econvert.3c
1527 qgconvert.3c         := LINKSRC = econvert.3c
1528 seconvert.3c         := LINKSRC = econvert.3c
1529 sfconvert.3c         := LINKSRC = econvert.3c
1530 sgconvert.3c         := LINKSRC = econvert.3c

1532 fcvt.3c              := LINKSRC = ecvt.3c
1533 gcvt.3c              := LINKSRC = ecvt.3c

1535 _edata.3c            := LINKSRC = end.3c
1536 _end.3c              := LINKSRC = end.3c
1537 _etext.3c            := LINKSRC = end.3c
1538 edata.3c            := LINKSRC = end.3c
1539 etext.3c            := LINKSRC = end.3c

1541 errx.3c              := LINKSRC = err.3c
1542 verr.3c             := LINKSRC = err.3c
1543 verrx.3c            := LINKSRC = err.3c
1544 vwarn.3c            := LINKSRC = err.3c
1545 vwarnx.3c           := LINKSRC = err.3c
1546 warn.3c            := LINKSRC = err.3c
1547 warnx.3c            := LINKSRC = err.3c

1549 euccol.3c           := LINKSRC = euclen.3c
1550 eucscol.3c          := LINKSRC = euclen.3c

1552 _exithandle.3c      := LINKSRC = exit.3c

1554 clearerr.3c         := LINKSRC = ferror.3c
1555 feof.3c            := LINKSRC = ferror.3c
1556 fileno.3c          := LINKSRC = ferror.3c

1558 fsetattnr.3c        := LINKSRC = fgetattnr.3c
1559 getattnr.3c         := LINKSRC = fgetattnr.3c
1560 setattnr.3c         := LINKSRC = fgetattnr.3c

1562 getc.3c             := LINKSRC = fgetc.3c
1563 getc_unlocked.3c    := LINKSRC = fgetc.3c
1564 getchar.3c          := LINKSRC = fgetc.3c
1565 getchar_unlocked.3c := LINKSRC = fgetc.3c
1566 getw.3c            := LINKSRC = fgetc.3c

1568 fgetwc_l.3c         := LINKSRC = fgetwc.3c

1570 double_to_decimal.3c := LINKSRC = floating_to_decimal.3c
1571 extended_to_decimal.3c := LINKSRC = floating_to_decimal.3c
1572 quadruple_to_decimal.3c := LINKSRC = floating_to_decimal.3c
1573 single_to_decimal.3c := LINKSRC = floating_to_decimal.3c

1575 ftrylockfile.3c     := LINKSRC = flockfile.3c
1576 funlockfile.3c     := LINKSRC = flockfile.3c

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1578 fpgetmask.3c      := LINKSRC = fpgetround.3c
1579 fpgetsticky.3c     := LINKSRC = fpgetround.3c
1580 fpsetmask.3c       := LINKSRC = fpgetround.3c
1581 fpsetround.3c      := LINKSRC = fpgetround.3c
1582 fpsetsticky.3c     := LINKSRC = fpgetround.3c

1584 putc.3c            := LINKSRC = fputc.3c
1585 putc_unlocked.3c   := LINKSRC = fputc.3c
1586 putchar.3c        := LINKSRC = fputc.3c
1587 putchar_unlocked.3c := LINKSRC = fputc.3c
1588 putw.3c            := LINKSRC = fputc.3c

1590 putwc.3c           := LINKSRC = fputwc.3c
1591 putwchar.3c        := LINKSRC = fputwc.3c

1593 fseeko.3c         := LINKSRC = fseek.3c

1595 ftello.3c         := LINKSRC = ftell.3c

1597 nftw.3c           := LINKSRC = ftw.3c

1599 swprintf.3c        := LINKSRC = fwprintf.3c
1600 wprintf.3c         := LINKSRC = fwprintf.3c

1602 swscanf.3c         := LINKSRC = fwscanf.3c
1603 vfwscanf.3c        := LINKSRC = fwscanf.3c
1604 vswscanf.3c        := LINKSRC = fwscanf.3c
1605 vwscanf.3c         := LINKSRC = fwscanf.3c
1606 wscanf.3c          := LINKSRC = fwscanf.3c

1608 gethomelgroup.3c   := LINKSRC = getcpuid.3c

1610 endgrent.3c        := LINKSRC = getgrnam.3c
1611 fgetgrent.3c       := LINKSRC = getgrnam.3c
1612 fgetgrent_r.3c     := LINKSRC = getgrnam.3c
1613 getgrent.3c        := LINKSRC = getgrnam.3c
1614 getgrent_r.3c      := LINKSRC = getgrnam.3c
1615 getgrgid.3c        := LINKSRC = getgrnam.3c
1616 getgrgid_r.3c      := LINKSRC = getgrnam.3c
1617 getgrnam_r.3c      := LINKSRC = getgrnam.3c
1618 setgrent.3c        := LINKSRC = getgrnam.3c

1620 sethostname.3c     := LINKSRC = gethostname.3c

1622 gethrvtime.3c     := LINKSRC = gethrtime.3c

1624 getdelim.3c       := LINKSRC = getline.3c

1626 getlogin_r.3c     := LINKSRC = getlogin.3c

1628 getextmntent.3c    := LINKSRC = getmntent.3c
1629 getmntany.3c       := LINKSRC = getmntent.3c
1630 hasmntopt.3c       := LINKSRC = getmntent.3c
1631 putmntent.3c       := LINKSRC = getmntent.3c
1632 resetmnttab.3c     := LINKSRC = getmntent.3c

1634 endnetgrent.3c     := LINKSRC = getnetgrent.3c
1635 getnetgrent_r.3c    := LINKSRC = getnetgrent.3c
1636 innetgr.3c         := LINKSRC = getnetgrent.3c
1637 setnetgrent.3c     := LINKSRC = getnetgrent.3c

1639 getpassphrase.3c   := LINKSRC = getpass.3c

1641 setpriority.3c     := LINKSRC = getpriority.3c

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1643 endpwent.3c        := LINKSRC = getpwnam.3c
1644 fgetpwent.3c        := LINKSRC = getpwnam.3c
1645 fgetpwent_r.3c      := LINKSRC = getpwnam.3c
1646 getpwent.3c         := LINKSRC = getpwnam.3c
1647 getpwent_r.3c       := LINKSRC = getpwnam.3c
1648 getpwnam_r.3c       := LINKSRC = getpwnam.3c
1649 getpwuid.3c         := LINKSRC = getpwnam.3c
1650 getpwuid_r.3c       := LINKSRC = getpwnam.3c
1651 setpwent.3c         := LINKSRC = getpwnam.3c

1653 fgets.3c           := LINKSRC = gets.3c

1655 endspent.3c        := LINKSRC = getspnam.3c
1656 fgetspent.3c        := LINKSRC = getspnam.3c
1657 fgetspent_r.3c      := LINKSRC = getspnam.3c
1658 getspent.3c         := LINKSRC = getspnam.3c
1659 getspent_r.3c       := LINKSRC = getspnam.3c
1660 getspnam_r.3c       := LINKSRC = getspnam.3c
1661 setspent.3c         := LINKSRC = getspnam.3c

1663 bind_textdomain_codeset.3c := LINKSRC = gettext.3c
1664 bindtextdomain.3c     := LINKSRC = gettext.3c
1665 dcgettext.3c          := LINKSRC = gettext.3c
1666 dcngettext.3c         := LINKSRC = gettext.3c
1667 dgettext.3c          := LINKSRC = gettext.3c
1668 dngettext.3c         := LINKSRC = gettext.3c
1669 ngettext.3c          := LINKSRC = gettext.3c
1670 textdomain.3c        := LINKSRC = gettext.3c

1672 settimeofday.3c      := LINKSRC = gettimeofday.3c

1674 endusershell.3c     := LINKSRC = getusershell.3c
1675 setusershell.3c     := LINKSRC = getusershell.3c

1677 endutent.3c         := LINKSRC = getutent.3c
1678 getutid.3c           := LINKSRC = getutent.3c
1679 getutline.3c         := LINKSRC = getutent.3c
1680 pututline.3c         := LINKSRC = getutent.3c
1681 setutent.3c          := LINKSRC = getutent.3c
1682 utmpname.3c          := LINKSRC = getutent.3c

1684 endutxent.3c        := LINKSRC = getutxent.3c
1685 getutmp.3c          := LINKSRC = getutxent.3c
1686 getutmpx.3c         := LINKSRC = getutxent.3c
1687 getutxid.3c         := LINKSRC = getutxent.3c
1688 getutxline.3c       := LINKSRC = getutxent.3c
1689 pututxline.3c       := LINKSRC = getutxent.3c
1690 setutxent.3c        := LINKSRC = getutxent.3c
1691 updwtmp.3c          := LINKSRC = getutxent.3c
1692 updwtmpx.3c         := LINKSRC = getutxent.3c
1693 utmpxname.3c        := LINKSRC = getutxent.3c

1695 getvfsany.3c        := LINKSRC = getvfsent.3c
1696 getvfsfile.3c       := LINKSRC = getvfsent.3c
1697 getvfsspec.3c       := LINKSRC = getvfsent.3c

1699 getwc_l.3c          := LINKSRC = getwc.3c

1701 getwchar_l.3c       := LINKSRC = getwchar.3c

1703 fgetws.3c           := LINKSRC = getws.3c

1705 getzoneidbyname.3c  := LINKSRC = getzoneid.3c
1706 getzoneidbyid.3c   := LINKSRC = getzoneid.3c

1708 globfree.3c         := LINKSRC = glob.3c

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1710 hcreate.3c      := LINKSRC = hsearch.3c
1711 hdestroy.3c     := LINKSRC = hsearch.3c

1713 rindex.3c       := LINKSRC = index.3c

1715 remque.3c       := LINKSRC = insque.3c

1717 finite.3c       := LINKSRC = isnand.3c
1718 fpclass.3c      := LINKSRC = isnand.3c
1719 isnanf.3c       := LINKSRC = isnand.3c
1720 unordered.3c    := LINKSRC = isnand.3c

1722 isenglish.3c     := LINKSRC = iswalpha.3c
1723 isideogram.3c    := LINKSRC = iswalpha.3c
1724 isnumber.3c     := LINKSRC = iswalpha.3c
1725 isphonogram.3c  := LINKSRC = iswalpha.3c
1726 isspecial.3c    := LINKSRC = iswalpha.3c
1727 iswalnum.3c     := LINKSRC = iswalpha.3c
1728 iswalnum_l.3c   := LINKSRC = iswalpha.3c
1729 iswalpha_l.3c   := LINKSRC = iswalpha.3c
1730 iswascii.3c     := LINKSRC = iswalpha.3c
1731 iswblank.3c     := LINKSRC = iswalpha.3c
1732 iswblank_l.3c   := LINKSRC = iswalpha.3c
1733 iswcntrl.3c     := LINKSRC = iswalpha.3c
1734 iswcntrl_l.3c   := LINKSRC = iswalpha.3c
1735 iswdigit.3c     := LINKSRC = iswalpha.3c
1736 iswdigit_l.3c   := LINKSRC = iswalpha.3c
1737 iswgraph.3c     := LINKSRC = iswalpha.3c
1738 iswgraph_l.3c   := LINKSRC = iswalpha.3c
1739 iswhexnumber.3c := LINKSRC = iswalpha.3c
1740 iswhexnumber_l.3c := LINKSRC = iswalpha.3c
1741 iswideogram.3c := LINKSRC = iswalpha.3c
1742 iswideogram_l.3c := LINKSRC = iswalpha.3c
1743 iswlower.3c     := LINKSRC = iswalpha.3c
1744 iswlower_l.3c   := LINKSRC = iswalpha.3c
1745 iswnumber.3c    := LINKSRC = iswalpha.3c
1746 iswnumber_l.3c := LINKSRC = iswalpha.3c
1747 iswphonogram.3c := LINKSRC = iswalpha.3c
1748 iswphonogram_l.3c := LINKSRC = iswalpha.3c
1749 iswprint.3c     := LINKSRC = iswalpha.3c
1750 iswprint_l.3c   := LINKSRC = iswalpha.3c
1751 iswpunct.3c     := LINKSRC = iswalpha.3c
1752 iswpunct_l.3c   := LINKSRC = iswalpha.3c
1753 iswspace.3c     := LINKSRC = iswalpha.3c
1754 iswspace_l.3c   := LINKSRC = iswalpha.3c
1755 iswspecial.3c   := LINKSRC = iswalpha.3c
1756 iswspecial_l.3c := LINKSRC = iswalpha.3c
1757 iswupper.3c     := LINKSRC = iswalpha.3c
1758 iswupper_l.3c   := LINKSRC = iswalpha.3c
1759 iswxdigit.3c    := LINKSRC = iswalpha.3c
1760 iswxdigit_l.3c  := LINKSRC = iswalpha.3c

1762 iswctype_l.3c   := LINKSRC = iswctype.3c

1764 ulckpwdf.3c     := LINKSRC = lckpwdf.3c

1766 lfind.3c        := LINKSRC = lsearch.3c

1768 swapcontext.3c  := LINKSRC = makecontext.3c

1770 major.3c       := LINKSRC = makedev.3c
1771 minor.3c       := LINKSRC = makedev.3c

1773 alloca.3c      := LINKSRC = malloc.3c
1774 calloc.3c      := LINKSRC = malloc.3c

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1775 free.3c        := LINKSRC = malloc.3c
1776 memalign.3c     := LINKSRC = malloc.3c
1777 realloc.3c      := LINKSRC = malloc.3c
1778 valloc.3c       := LINKSRC = malloc.3c

1780 mblen_l.3c      := LINKSRC = mblen.3c

1782 mbrlen_l.3c    := LINKSRC = mbrlen.3c

1784 mbrtowc_l.3c    := LINKSRC = mbrtowc.3c

1786 mbsinit_l.3c   := LINKSRC = mbsinit.3c

1788 mbsnrtowcs.3c   := LINKSRC = mbsrtowcs.3c
1789 mbsnrtowcs_l.3c := LINKSRC = mbsrtowcs.3c
1790 mbsrtowcs_l.3c  := LINKSRC = mbsrtowcs.3c
1791 mbstowcs.3c     := LINKSRC = mbsrtowcs.3c
1792 mbstowcs_l.3c   := LINKSRC = mbsrtowcs.3c

1794 mbtowc_l.3c     := LINKSRC = mbtowc.3c

1796 membar_consumer.3c := LINKSRC = membar_ops.3c
1797 membar_enter.3c    := LINKSRC = membar_ops.3c
1798 membar_exit.3c     := LINKSRC = membar_ops.3c
1799 membar_producer.3c := LINKSRC = membar_ops.3c

1801 memccpy.3c       := LINKSRC = memory.3c
1802 memchr.3c        := LINKSRC = memory.3c
1803 memcmp.3c        := LINKSRC = memory.3c
1804 memcpy.3c        := LINKSRC = memory.3c
1805 memmove.3c       := LINKSRC = memory.3c
1806 memset.3c        := LINKSRC = memory.3c

1808 mkdtemp.3c       := LINKSRC = mkstemp.3c
1809 mkostemp.3c      := LINKSRC = mkstemp.3c
1810 mkostemps.3c     := LINKSRC = mkstemp.3c
1811 mkstemps.3c     := LINKSRC = mkstemp.3c

1813 munlock.3c      := LINKSRC = mlock.3c

1815 munlockall.3c   := LINKSRC = mlockall.3c

1817 mq_reltimedreceive_np.3c := LINKSRC = mq_receive.3c
1818 mq_timedreceive.3c      := LINKSRC = mq_receive.3c

1820 mq_reltimedsend_np.3c   := LINKSRC = mq_send.3c
1821 mq_timedsend.3c        := LINKSRC = mq_send.3c

1823 mutex_consistent.3c    := LINKSRC = mutex_init.3c
1824 mutex_destroy.3c       := LINKSRC = mutex_init.3c
1825 mutex_lock.3c          := LINKSRC = mutex_init.3c
1826 mutex_trylock.3c       := LINKSRC = mutex_init.3c
1827 mutex_unlock.3c        := LINKSRC = mutex_init.3c

1829 dbm_clearerr.3c         := LINKSRC = ndbm.3c
1830 dbm_close.3c            := LINKSRC = ndbm.3c
1831 dbm_delete.3c           := LINKSRC = ndbm.3c
1832 dbm_error.3c            := LINKSRC = ndbm.3c
1833 dbm_fetch.3c            := LINKSRC = ndbm.3c
1834 dbm_firstkey.3c         := LINKSRC = ndbm.3c
1835 dbm_nextkey.3c          := LINKSRC = ndbm.3c
1836 dbm_open.3c             := LINKSRC = ndbm.3c
1837 dbm_store.3c            := LINKSRC = ndbm.3c

1839 duplocale.3c           := LINKSRC = newlocale.3c
1840 freelocale.3c          := LINKSRC = newlocale.3c

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1842 nl_langinfo.1.3c      := LINKSRC = nl_langinfo.3c
1844 fdopendir.3c          := LINKSRC = opendir.3c
1846 errno.3c              := LINKSRC = perror.3c
1848 pclose.3c              := LINKSRC = popen.3c
1850 port_dissociate.3c     := LINKSRC = port_associate.3c
1852 port_getn.3c           := LINKSRC = port_get.3c
1854 port_sendn.3c          := LINKSRC = port_send.3c
1856 posix_spawn.3c         := LINKSRC = posix_spawn.3c
1858 posix_spawn_file_actions_addopen.3c := LINKSRC = posix_spawn_file_actions_ad
1859 posix_spawn_file_actions_init.3c   := LINKSRC = posix_spawn_file_actions_de
1861 posix_spawnattr_init.3c := LINKSRC = posix_spawnattr_destroy.3c
1863 posix_spawnattr_setflags.3c := LINKSRC = posix_spawnattr_getflags.3c
1865 posix_spawnattr_setpgroup.3c := LINKSRC = posix_spawnattr_getpgroup.3
1867 posix_spawnattr_setschedparam.3c := LINKSRC = posix_spawnattr_getschedpar
1869 posix_spawnattr_setschedpolicy.3c := LINKSRC = posix_spawnattr_getschedpol
1871 posix_spawnattr_setsigdefault.3c := LINKSRC = posix_spawnattr_getsigdefau
1873 posix_spawnattr_setsigignore_np.3c := LINKSRC = posix_spawnattr_getsigignor
1875 posix_spawnattr_setsigmask.3c := LINKSRC = posix_spawnattr_getsigmask.
1877 asprintf.3c            := LINKSRC = printf.3c
1878 fprintf.3c              := LINKSRC = printf.3c
1879 snprintf.3c             := LINKSRC = printf.3c
1880 sprintf.3c              := LINKSRC = printf.3c
1882 priv_allocset.3c        := LINKSRC = priv_addset.3c
1883 priv_basicset.3c        := LINKSRC = priv_addset.3c
1884 priv_copyset.3c         := LINKSRC = priv_addset.3c
1885 priv_delset.3c          := LINKSRC = priv_addset.3c
1886 priv_emptyset.3c        := LINKSRC = priv_addset.3c
1887 priv_fillset.3c         := LINKSRC = priv_addset.3c
1888 priv_freeset.3c         := LINKSRC = priv_addset.3c
1889 priv_intersect.3c       := LINKSRC = priv_addset.3c
1890 priv_inverse.3c         := LINKSRC = priv_addset.3c
1891 priv_isemptyset.3c       := LINKSRC = priv_addset.3c
1892 priv_isequalset.3c      := LINKSRC = priv_addset.3c
1893 priv_isfullset.3c       := LINKSRC = priv_addset.3c
1894 priv_ismember.3c        := LINKSRC = priv_addset.3c
1895 priv_issubset.3c        := LINKSRC = priv_addset.3c
1896 priv_union.3c           := LINKSRC = priv_addset.3c
1898 priv_ineffect.3c        := LINKSRC = priv_set.3c
1900 priv_getbyname.3c       := LINKSRC = priv_str_to_set.3c
1901 priv_getbynum.3c        := LINKSRC = priv_str_to_set.3c
1902 priv_getsetbyname.3c    := LINKSRC = priv_str_to_set.3c
1903 priv_getsetbynum.3c     := LINKSRC = priv_str_to_set.3c
1904 priv_gettext.3c         := LINKSRC = priv_str_to_set.3c
1905 priv_set_to_str.3c      := LINKSRC = priv_str_to_set.3c

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1907 psiginfo.3c           := LINKSRC = psignal.3c
1909 pthread_attr_setdetachstate.3c := LINKSRC = pthread_attr_getdetachstate
1911 pthread_attr_setguardsize.3c  := LINKSRC = pthread_attr_getguardsize.3
1913 pthread_attr_setinheritsched.3c := LINKSRC = pthread_attr_getinheritsche
1915 pthread_attr_setschedparam.3c := LINKSRC = pthread_attr_getschedparam.
1917 pthread_attr_setschedpolicy.3c := LINKSRC = pthread_attr_getschedpolicy
1919 pthread_attr_setscope.3c      := LINKSRC = pthread_attr_getscope.3c
1920 pthread_attr_setstack.3c      := LINKSRC = pthread_attr_getstack.3c
1922 pthread_attr_setstackaddr.3c  := LINKSRC = pthread_attr_getstackaddr.3
1924 pthread_attr_setstacksize.3c  := LINKSRC = pthread_attr_getstacksize.3
1926 pthread_attr_destroy.3c       := LINKSRC = pthread_attr_init.3c
1928 pthread_barrier_init.3c       := LINKSRC = pthread_barrier_destroy.3c
1930 pthread_barrierattr_init.3c   := LINKSRC = pthread_barrierattr_destroy
1932 pthread_barrierattr_setpshared.3c := LINKSRC = pthread_barrierattr_getpsha
1934 pthread_cond_destroy.3c       := LINKSRC = pthread_cond_init.3c
1936 pthread_cond_broadcast.3c     := LINKSRC = pthread_cond_signal.3c
1938 pthread_cond_reltimedwait_np.3c := LINKSRC = pthread_cond_wait.3c
1939 pthread_cond_timedwait.3c     := LINKSRC = pthread_cond_wait.3c
1941 pthread_condattr_setclock.3c  := LINKSRC = pthread_condattr_getclock.3
1943 pthread_condattr_setpshared.3c := LINKSRC = pthread_condattr_getpshared
1945 pthread_condattr_destroy.3c   := LINKSRC = pthread_condattr_init.3c
1947 pthread_setconcurrency.3c     := LINKSRC = pthread_getconcurrency.3c
1949 pthread_setschedparam.3c      := LINKSRC = pthread_getschedparam.3c
1951 pthread_setspecific.3c        := LINKSRC = pthread_getspecific.3c
1953 pthread_key_create_once_np.3c := LINKSRC = pthread_key_create.3c
1955 pthread_mutex_setprioceiling.3c := LINKSRC = pthread_mutex_getprioceilin
1957 pthread_mutex_destroy.3c      := LINKSRC = pthread_mutex_init.3c
1959 pthread_mutex_trylock.3c      := LINKSRC = pthread_mutex_lock.3c
1960 pthread_mutex_unlock.3c       := LINKSRC = pthread_mutex_lock.3c
1962 pthread_mutex_reltimedlock_np.3c := LINKSRC = pthread_mutex_timedlock.3c
1964 pthread_mutexattr_setprioceiling.3c := LINKSRC = pthread_mutexattr_getprioce
1966 pthread_mutexattr_setprotocol.3c := LINKSRC = pthread_mutexattr_getprotoc
1968 pthread_mutexattr_setpshared.3c := LINKSRC = pthread_mutexattr_getpshare
1970 pthread_mutexattr_settype.3c   := LINKSRC = pthread_mutexattr_gettype.3
1972 pthread_mutexattr_destroy.3c   := LINKSRC = pthread_mutexattr_init.3c

```

```

1974 pthread_rwlock_destroy.3c      := LINKSRC = pthread_rwlock_init.3c
1976 pthread_rwlock_tryrdlock.3c    := LINKSRC = pthread_rwlock_rdlock.3c
1978 pthread_rwlock_reltimedrdlock_np.3c := LINKSRC = pthread_rwlock_timedrdlock.
1980 pthread_rwlock_reltimedwrlock_np.3c := LINKSRC = pthread_rwlock_timedwrlock.
1982 pthread_rwlock_trywrlock.3c     := LINKSRC = pthread_rwlock_wrlock.3c
1984 pthread_rwlockattr_setpshared.3c := LINKSRC = pthread_rwlockattr_getpshar
1986 pthread_rwlockattr_destroy.3c    := LINKSRC = pthread_rwlockattr_init.3c
1988 pthread_spin_init.3c             := LINKSRC = pthread_spin_destroy.3c
1990 pthread_spin_trylock.3c          := LINKSRC = pthread_spin_lock.3c
1992 fputs.3c                        := LINKSRC = puts.3c
1994 rand_r.3c                       := LINKSRC = rand.3c
1995 srand.3c                       := LINKSRC = rand.3c
1997 initstate.3c                   := LINKSRC = random.3c
1998 setstate.3c                   := LINKSRC = random.3c
1999 srandom.3c                    := LINKSRC = random.3c
2001 rctlblk_get_enforced_value.3c    := LINKSRC = rctlblk_set_value.3c
2002 rctlblk_get_firing_time.3c      := LINKSRC = rctlblk_set_value.3c
2003 rctlblk_get_global_action.3c    := LINKSRC = rctlblk_set_value.3c
2004 rctlblk_get_global_flags.3c     := LINKSRC = rctlblk_set_value.3c
2005 rctlblk_get_local_action.3c     := LINKSRC = rctlblk_set_value.3c
2006 rctlblk_get_local_flags.3c      := LINKSRC = rctlblk_set_value.3c
2007 rctlblk_get_privilege.3c        := LINKSRC = rctlblk_set_value.3c
2008 rctlblk_get_recipient_pid.3c    := LINKSRC = rctlblk_set_value.3c
2009 rctlblk_get_value.3c            := LINKSRC = rctlblk_set_value.3c
2010 rctlblk_set_local_action.3c     := LINKSRC = rctlblk_set_value.3c
2011 rctlblk_set_local_flags.3c      := LINKSRC = rctlblk_set_value.3c
2012 rctlblk_set_privilege.3c        := LINKSRC = rctlblk_set_value.3c
2013 rctlblk_set_recipient_pid.3c    := LINKSRC = rctlblk_set_value.3c
2014 rctlblk_size.3c                := LINKSRC = rctlblk_set_value.3c
2016 re_exec.3c                    := LINKSRC = re_comp.3c
2018 readdir_r.3c                 := LINKSRC = readdir.3c
2020 regex.3c                     := LINKSRC = regcmp.3c
2022 regerror.3c                  := LINKSRC = regcomp.3c
2023 regexec.3c                  := LINKSRC = regcomp.3c
2024 regfree.3c                   := LINKSRC = regcomp.3c
2026 rw_rdlock.3c                 := LINKSRC = rwlock.3c
2027 rw_tryrdlock.3c              := LINKSRC = rwlock.3c
2028 rw_trywrlock.3c              := LINKSRC = rwlock.3c
2029 rw_unlock.3c                 := LINKSRC = rwlock.3c
2030 rw_wrlock.3c                 := LINKSRC = rwlock.3c
2031 rwlock_destroy.3c             := LINKSRC = rwlock.3c
2032 rwlock_init.3c               := LINKSRC = rwlock.3c
2034 alphasort.3c                 := LINKSRC = scandir.3c
2036 fscanf.3c                    := LINKSRC = scanf.3c
2037 sscanf.3c                    := LINKSRC = scanf.3c
2038 vscanf.3c                    := LINKSRC = scanf.3c

```

```

2039 vscanf.3c                    := LINKSRC = scanf.3c
2040 vsscanf.3c                   := LINKSRC = scanf.3c
2042 sched_get_priority_min.3c      := LINKSRC = sched_get_priority_max.3c
2044 schedctl_exit.3c              := LINKSRC = schedctl_init.3c
2045 schedctl_lookup.3c            := LINKSRC = schedctl_init.3c
2046 schedctl_start.3c             := LINKSRC = schedctl_init.3c
2047 schedctl_stop.3c             := LINKSRC = schedctl_init.3c
2049 FD_CLR.3c                    := LINKSRC = select.3c
2050 FD_ISSET.3c                   := LINKSRC = select.3c
2051 FD_SET.3c                     := LINKSRC = select.3c
2052 FD_ZERO.3c                   := LINKSRC = select.3c
2053 pselect.3c                    := LINKSRC = select.3c
2055 sem_reltimedwait_np.3c        := LINKSRC = sem_timedwait.3c
2057 sem_trywait.3c               := LINKSRC = sem_wait.3c
2059 sema_destroy.3c              := LINKSRC = semaphore.3c
2060 sema_init.3c                  := LINKSRC = semaphore.3c
2061 sema_post.3c                  := LINKSRC = semaphore.3c
2062 sema_trywait.3c              := LINKSRC = semaphore.3c
2063 sema_wait.3c                  := LINKSRC = semaphore.3c
2065 setvbuf.3c                   := LINKSRC = setbuf.3c
2067 setlinebuf.3c                := LINKSRC = setbuffer.3c
2069 longjmp.3c                   := LINKSRC = setjmp.3c
2070 siglongjmp.3c                := LINKSRC = setjmp.3c
2071 sigsetjmp.3c                 := LINKSRC = setjmp.3c
2073 sighold.3c                   := LINKSRC = signal.3c
2074 sigignore.3c                 := LINKSRC = signal.3c
2075 sigpause.3c                  := LINKSRC = signal.3c
2076 sigrelse.3c                  := LINKSRC = signal.3c
2077 sigset.3c                    := LINKSRC = signal.3c
2079 sigaddset.3c                 := LINKSRC = sigsetops.3c
2080 sigdelset.3c                 := LINKSRC = sigsetops.3c
2081 sigemptyset.3c               := LINKSRC = sigsetops.3c
2082 sigfillset.3c                := LINKSRC = sigsetops.3c
2083 sigismember.3c               := LINKSRC = sigsetops.3c
2085 sigtimedwait.3c              := LINKSRC = sigwaitinfo.3c
2087 gsignal.3c                  := LINKSRC = ssignal.3c
2089 stderr.3c                   := LINKSRC = stdio.3c
2090 stdin.3c                    := LINKSRC = stdio.3c
2091 stdout.3c                   := LINKSRC = stdio.3c
2093 sig2str.3c                   := LINKSRC = str2sig.3c
2095 strcoll_l.3c                 := LINKSRC = strcoll.3c
2097 strerror_r.3c                := LINKSRC = strerror.3c
2099 strfmon_l.3c                 := LINKSRC = strfmon.3c
2101 asctime.3c                   := LINKSRC = strftime.3c
2102 cftime.3c                   := LINKSRC = strftime.3c
2103 strftime_l.3c                := LINKSRC = strftime.3c

```

```

2105 strcasecmp.3c      := LINKSRC = string.3c
2106 strcasecmp_l.3c    := LINKSRC = string.3c
2107 strcat.3c           := LINKSRC = string.3c
2108 strchr.3c           := LINKSRC = string.3c
2109 strcmp.3c           := LINKSRC = string.3c
2110 strcpy.3c           := LINKSRC = string.3c
2111 strcspn.3c          := LINKSRC = string.3c
2112 strdup.3c           := LINKSRC = string.3c
2113 strlcat.3c          := LINKSRC = string.3c
2114 strlcpy.3c          := LINKSRC = string.3c
2115 strlen.3c           := LINKSRC = string.3c
2116 strncasecmp.3c      := LINKSRC = string.3c
2117 strncasecmp_l.3c    := LINKSRC = string.3c
2118 strncat.3c          := LINKSRC = string.3c
2119 strncmp.3c          := LINKSRC = string.3c
2120 strncpy.3c          := LINKSRC = string.3c
2121 strnlen.3c          := LINKSRC = string.3c
2122 strpbrk.3c          := LINKSRC = string.3c
2123 strrchr.3c          := LINKSRC = string.3c
2124 strsep.3c           := LINKSRC = string.3c
2125 strspn.3c           := LINKSRC = string.3c
2126 strstr.3c           := LINKSRC = string.3c
2127 strtok.3c           := LINKSRC = string.3c
2128 strtok_r.3c         := LINKSRC = string.3c

2130 file_to_decimal.3c  := LINKSRC = string_to_decimal.3c
2131 func_to_decimal.3c  := LINKSRC = string_to_decimal.3c

2133 strptime.1.3c       := LINKSRC = strptime.3c

2135 atof.3c             := LINKSRC = strtod.3c
2136 strtod.3c           := LINKSRC = strtod.3c
2137 strtold.3c          := LINKSRC = strtod.3c

2139 strtoumax.3c        := LINKSRC = strtoumax.3c

2141 atoi.3c             := LINKSRC = strtol.3c
2142 atol.3c             := LINKSRC = strtol.3c
2143 atoll.3c            := LINKSRC = strtol.3c
2144 lltostr.3c          := LINKSRC = strtol.3c
2145 strtoll.3c          := LINKSRC = strtol.3c
2146 ulltostr.3c         := LINKSRC = strtol.3c

2148 strtoull.3c         := LINKSRC = strtoul.3c

2150 wstostr.3c          := LINKSRC = strtows.3c

2152 strxfrm.1.3c        := LINKSRC = strxfrm.3c

2154 closelog.3c         := LINKSRC = syslog.3c
2155 openlog.3c          := LINKSRC = syslog.3c
2156 setlogmask.3c       := LINKSRC = syslog.3c

2158 thr_setconcurrency.3c := LINKSRC = thr_getconcurrency.3c

2160 thr_setprio.3c       := LINKSRC = thr_getprio.3c

2162 thr_getspecific.3c   := LINKSRC = thr_keycreate.3c
2163 thr_keycreate_once.3c := LINKSRC = thr_keycreate.3c
2164 thr_setspecific.3c   := LINKSRC = thr_keycreate.3c

2166 thr_continue.3c     := LINKSRC = thr_suspend.3c

2168 timer_getoverrun.3c  := LINKSRC = timer_settime.3c
2169 timer_gettime.3c    := LINKSRC = timer_settime.3c

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2171 timerclear.3c       := LINKSRC = timeradd.3c
2172 timercmp.3c         := LINKSRC = timeradd.3c
2173 timerisset.3c      := LINKSRC = timeradd.3c
2174 timersub.3c         := LINKSRC = timeradd.3c

2176 tmpnam.3c          := LINKSRC = tmpnam.3c
2177 tmpnam_r.3c         := LINKSRC = tmpnam.3c

2179 tolower.1.3c        := LINKSRC = tolower.3c

2181 toupper.1.3c        := LINKSRC = toupper.3c

2183 tolower.1.3c        := LINKSRC = tolower.3c

2185 toupper.1.3c        := LINKSRC = toupper.3c

2187 truncate.3c         := LINKSRC = truncate.3c

2189 tdelete.3c          := LINKSRC = tsearch.3c
2190 tfind.3c            := LINKSRC = tsearch.3c
2191 twalk.3c            := LINKSRC = tsearch.3c

2193 ttyname_r.3c        := LINKSRC = ttyname.3c

2195 uconv_ul6tou8.3c    := LINKSRC = uconv_ul6tou32.3c
2196 uconv_u32tou16.3c  := LINKSRC = uconv_ul6tou32.3c
2197 uconv_u32tou8.3c   := LINKSRC = uconv_ul6tou32.3c
2198 uconv_u8tou16.3c   := LINKSRC = uconv_ul6tou32.3c
2199 uconv_u8tou32.3c   := LINKSRC = uconv_ul6tou32.3c

2201 ucred_free.3c        := LINKSRC = ucred_get.3c
2202 ucred_getegid.3c    := LINKSRC = ucred_get.3c
2203 ucred_geteuid.3c    := LINKSRC = ucred_get.3c
2204 ucred_getgroups.3c  := LINKSRC = ucred_get.3c
2205 ucred_getlabel.3c   := LINKSRC = ucred_get.3c
2206 ucred_getpflags.3c  := LINKSRC = ucred_get.3c
2207 ucred_getpid.3c     := LINKSRC = ucred_get.3c
2208 ucred_getprivset.3c := LINKSRC = ucred_get.3c
2209 ucred_getprojid.3c  := LINKSRC = ucred_get.3c
2210 ucred_getrgid.3c    := LINKSRC = ucred_get.3c
2211 ucred_getruid.3c    := LINKSRC = ucred_get.3c
2212 ucred_getsgid.3c    := LINKSRC = ucred_get.3c
2213 ucred_getsuid.3c    := LINKSRC = ucred_get.3c
2214 ucred_getzoneid.3c  := LINKSRC = ucred_get.3c
2215 ucred_size.3c       := LINKSRC = ucred_get.3c

2217 vswprintf.3c         := LINKSRC = vfwprintf.3c
2218 vwprintf.3c         := LINKSRC = vfwprintf.3c

2220 vasprintf.3c        := LINKSRC = vprintf.3c
2221 vfprintf.3c         := LINKSRC = vprintf.3c
2222 vsnprintf.3c        := LINKSRC = vprintf.3c
2223 vsprintf.3c         := LINKSRC = vprintf.3c

2225 wait4.3c           := LINKSRC = wait3.3c

2227 addrtosymstr.3c     := LINKSRC = walkcontext.3c
2228 backtrace.3c        := LINKSRC = walkcontext.3c
2229 backtrace_symbols.3c := LINKSRC = walkcontext.3c
2230 backtrace_symbols_fd.3c := LINKSRC = walkcontext.3c
2231 printstack.3c       := LINKSRC = walkcontext.3c

2233 wctomb.1.3c         := LINKSRC = wctomb.3c

2235 wcscasecmp.1.3c     := LINKSRC = wcscasecmp.3c
2236 wcsncasecmp.3c      := LINKSRC = wcscasecmp.3c

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2237 wscnsecmp_1.3c      := LINKSRC = wscnsecmp.3c
2239 wscoll_1.3c          := LINKSRC = wscoll.3c
2240 wscoll.3c             := LINKSRC = wscoll.3c
2242 wcsnlen.3c           := LINKSRC = wcslen.3c
2244 wsnrtombs.3c         := LINKSRC = wsnrtombs.3c
2245 wsnrtombs_1.3c       := LINKSRC = wsnrtombs.3c
2246 wsnrtombs_1.3c       := LINKSRC = wsnrtombs.3c
2248 watof.3c             := LINKSRC = wctod.3c
2249 wctof.3c              := LINKSRC = wctod.3c
2250 wctold.3c            := LINKSRC = wctod.3c
2251 wctod.3c             := LINKSRC = wctod.3c
2253 wctoumax.3c         := LINKSRC = wctoumax.3c
2255 watoi.3c            := LINKSRC = wctol.3c
2256 watol.3c            := LINKSRC = wctol.3c
2257 watoll.3c           := LINKSRC = wctol.3c
2258 wcstoll.3c          := LINKSRC = wctol.3c
2259 wctol.3c            := LINKSRC = wctol.3c
2261 wcstoull.3c         := LINKSRC = wcstoul.3c
2263 wscat.3c            := LINKSRC = wcstring.3c
2264 wscchr.3c          := LINKSRC = wcstring.3c
2265 wscmp.3c           := LINKSRC = wcstring.3c
2266 wscpy.3c           := LINKSRC = wcstring.3c
2267 wscspn.3c         := LINKSRC = wcstring.3c
2268 wscsnlen.3c       := LINKSRC = wcstring.3c
2268 wscsnlen.3c       := LINKSRC = wcstring.3c
2268 wscsnlen.3c       := LINKSRC = wcstring.3c
2269 wscsnlen.3c       := LINKSRC = wcstring.3c
2270 wscsnlen.3c       := LINKSRC = wcstring.3c
2271 wscsnlen.3c       := LINKSRC = wcstring.3c
2272 wscsnlen.3c       := LINKSRC = wcstring.3c
2273 wscsnlen.3c       := LINKSRC = wcstring.3c
2274 wscsnlen.3c       := LINKSRC = wcstring.3c
2275 wscsnlen.3c       := LINKSRC = wcstring.3c
2276 wscsnlen.3c       := LINKSRC = wcstring.3c
2277 wscsnlen.3c       := LINKSRC = wcstring.3c
2278 wscsnlen.3c       := LINKSRC = wcstring.3c
2279 wscsnlen.3c       := LINKSRC = wcstring.3c
2280 wscsnlen.3c       := LINKSRC = wcstring.3c
2281 wscsnlen.3c       := LINKSRC = wcstring.3c
2282 wscsnlen.3c       := LINKSRC = wcstring.3c
2283 wscsnlen.3c       := LINKSRC = wcstring.3c
2284 wscsnlen.3c       := LINKSRC = wcstring.3c
2285 wscsnlen.3c       := LINKSRC = wcstring.3c
2286 wscsnlen.3c       := LINKSRC = wcstring.3c
2287 wscsnlen.3c       := LINKSRC = wcstring.3c
2288 wscsnlen.3c       := LINKSRC = wcstring.3c
2289 wscsnlen.3c       := LINKSRC = wcstring.3c
2290 wscsnlen.3c       := LINKSRC = wcstring.3c
2291 wscsnlen.3c       := LINKSRC = wcstring.3c
2292 wscsnlen.3c       := LINKSRC = wcstring.3c
2293 wscsnlen.3c       := LINKSRC = wcstring.3c
2294 wscsnlen.3c       := LINKSRC = wcstring.3c
2296 wscwidth_1.3c      := LINKSRC = wscwidth.3c
2298 wscxfrm.3c         := LINKSRC = wscxfrm.3c
2300 wctob_1.3c        := LINKSRC = wctob.3c

```

```

2302 wctomb_1.3c       := LINKSRC = wctomb.3c
2304 towctrans.3c       := LINKSRC = wctrans.3c
2305 towctrans_1.3c    := LINKSRC = wctrans.3c
2306 wctrans_1.3c       := LINKSRC = wctrans.3c
2308 wctype_1.3c        := LINKSRC = wctype.3c
2310 wcwidth_1.3c       := LINKSRC = wcwidth.3c
2312 wordfree.3c        := LINKSRC = wordexp.3c
2314 .KEEP_STATE:
2316 include             $(SRC)/man/Makefile.man
2318 install:            $(ROOTMANFILES) $(ROOTMANLINKS)

```

4160 Sun Jul 27 18:01:27 2014
new/usr/src/man/man3c/bsd_signal.3c
Minor markup tweaks (Sy instead of Nm).
fix incorrect standard citations
first round of POSIX 2008 stuff

```
1 \" te
2 \" Copyright (c) 1992, X/Open Company Limited All Rights Reserved Portions Co
3 \" Sun Microsystems, Inc. gratefully acknowledges The Open Group for permission
4 \" http://www.opengroup.org/bookstore/.
5 \" The Institute of Electrical and Electronics Engineers and The Open Group, ha
6 \" This notice shall appear on any product containing this material.
7 \" The contents of this file are subject to the terms of the Common Development
8 \" You can obtain a copy of the license at usr/src/OPENSOLARIS.LICENSE or http:
9 \" When distributing Covered Code, include this CDDL HEADER in each file and in
9 .Dd "Jul 19, 2014"
10 .Dt BSD_SIGNAL 3C
11 .Os
12 .Sh NAME
13 .Nm bsd_signal
14 .Nd simplified signal facilities
15 .Sh SYNOPSIS
16 .In signal.h
17 .Ft void
18 .Fn \"(lp*bsd_signal \"int sig\" \"void \"*(lp*func\"*(rp\"*(lpint\"*(rp\"*(rp\"*(rp\"*(lp
19 .\" \\fBvoid\\fR (\\fB*bsd_signal(int\\fR \\fIsig\\fR, \\fBvoid\\fR (*\\fIfunc\\fR)(\\fBint
20 .Sh DESCRIPTION
21 The
22 .Fn bsd_signal
23 function provides a partially compatible interface for
24 programs written to historical system interfaces (see
25 .Sx USAGE
26 below).
27 .Lp
28 The function call
29 .Fn bsd_signal sig func
30 has an effect as if implemented as:
31 .Bd -literal -offset indent
10 .TH BSD_SIGNAL 3C "Jul 24, 2002"
11 .SH NAME
12 bsd_signal \\- simplified signal facilities
13 .SH SYNOPSIS
14 .LP
15 .nf
16 #include <signal.h>

18 \\fBvoid\\fR (\\fB*bsd_signal(int\\fR \\fIsig\\fR, \\fBvoid\\fR (*\\fIfunc\\fR)(\\fBint\\fR)
19 .fi

21 .SH DESCRIPTION
22 .sp
23 .LP
24 The \\fBbsd_signal()\\fR function provides a partially compatible interface for
25 programs written to historical system interfaces (see \\fBUSAGE\\fR below).
26 .sp
27 .LP
28 The function call \\fBbsd_signal\\fR(\\fIsig\\fR, \\fIfunc\\fR) has an effect as if
29 implemented as:
30 .sp
31 .in +2
32 .nf
33 void (*bsd_signal(int sig, void (*func)(int)))(int)
34 {
35     struct sigaction act, oact;
```

```
36 act.sa_handler = func;
37 act.sa_handler = \\fIfunc\\fR;
37 act.sa_flags = SA_RESTART;
38 sigemptyset(&act.sa_mask);
39 sigaddset(&act.sa_mask, sig);
40 if (sigaction(sig, &act, &oact) == \\(mil)
41     return(SIG_ERR);
40 sigaddset(&act.sa_mask, \\fIsig\\fR);
41 if (sigaction(\\fIsig\\fR, &act, &oact) == \\(mil)
42     return(\\fBSIG_ERR\\fR);
42 return(oact.sa_handler);
43 }
44 .Ed
45 .Lp
45 .fi
46 .in -2

48 .sp
49 .LP
46 The handler function should be declared:
47 .Lp
48 .Dl Ft void Fn handler "int sig" ;
49 .Lp
50 where
51 .Fa sig
52 is the signal number. The behavior is undefined if
53 .Fa func
54 is a function that takes more than one argument, or an argument of a different
55 type.
56 .Sh RETURN VALUES
57 Upon successful completion,
58 .Fn bsd_signal
59 returns the previous action for
60 .Fa sig .
61 Otherwise,
62 .Dv SIG_ERR
63 is returned and
64 .Va errno
65 is set to indicate the error.
66 .Sh ERRORS
67 Refer to
68 .Xr sigaction 2 .
69 .Sh USAGE
70 This function is a direct replacement for the
71 .Bx
72 .Fn signal
73 .SH RETURN VALUES
74 .sp
75 .LP
76 Upon successful completion, \\fBbsd_signal()\\fR returns the previous action for
77 \\fIsig\\fR. Otherwise, \\fBSIG_ERR\\fR is returned and \\fBerrno\\fR is set to
78 indicate the error.
79 .SH ERRORS
80 .sp
81 .LP
82 Refer to \\fBsigaction\\fR(2).
```

```

73 .SH USAGE
74 .sp
75 .LP
76 This function is a direct replacement for the \fBBSD\fR \fBsignal\fR(3UCB)
73 function for simple applications that are installing a single-argument signal
74 handler function. If a
75 .Bx
76 signal handler function is being installed
78 handler function. If a \fBBSD\fR signal handler function is being installed
77 that expects more than one argument, the application has to be modified to use
78 .Xr sigaction 2 .
79 .Lp
80 Portable applications should use
81 .Xr sigaction 2
82 instead of this function.
83 .Sh INTERFACE STABILITY
84 .Sy Obsolete Standard .
85 .Sh SEE ALSO
86 .Xr sigaction 2 ,
87 .Xr sigaddset 3C ,
88 .Xr sigemptyset 3C ,
89 .Xr standards 5
90 .Sh STANDARDS
91 The
92 .Fn bsd_signal
93 function was added in
94 .St -xpg4.2 .
95 It was subsequently obsoleted in
96 .St -p1003.1-2001
97 and removed from
98 .St -p1003.1-2008 .
99 \fBsigaction\fR(2). The \fBbsd_signal\fR function differs from
81 \fBsignal\fR(3UCB) in that the \fBBSA_RESTART\fR flag is set and the
82 \fBBSA_RESETHAND\fR will be clear when \fBbsd_signal\fR is used. The state of
83 these flags is not specified for \fBsignal\fR(3UCB).
84 .SH ATTRIBUTES
85 .sp
86 .LP
87 See \fBattributes\fR(5) for descriptions of the following attributes:
88 .sp
90 .sp
91 .TS
92 box;
93 c | c
94 l | l .
95 ATTRIBUTE TYPE      ATTRIBUTE VALUE
96 -
97 Interface Stability      Standard
98 .TE
100 .SH SEE ALSO
101 .sp
102 .LP
103 \fBsigaction\fR(2), \fBsigaddset\fR(3C), \fBsigemptyset\fR(3C),
104 \fBsignal\fR(3UCB), \fBattributes\fR(5), \fBstandards\fR(5)

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*****
2284 Sun Jul 27 18:01:29 2014
new/usr/src/man/man3c/bstring.3c
Minor markup tweaks (Sy instead of Nm).
first round of POSIX 2008 stuff
*****
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6 .Dd \"Jul 19, 2014\"
7 .Dt BSTRING 3C
8 .Os
9 .Sh NAME
10 .Nm bstring, bcopy, bcmp, bzero
11 .Nd memory operations
12 .Sh SYNOPSIS
13 .In strings.h
14 .Ft void
15 .Fn bcopy \"const void *s1\" \"void *s2\" \"size_t n\"
16 .Ft int
17 .Fn bcmp \"const void *s1\" \"const void *s2\" \"size_t n\"
18 .Ft void
19 .Fn bzero \"void *s\" \"size_t n\"
20 .Sh DESCRIPTION
21 The
22 .Fn bcopy ,
23 .Fn bcmp ,
24 and
25 .Fn bzero
26 functions operate as
27 .TH BSTRING 3C \"Apr 15, 2002\"
28 .SH NAME
29 bstring, bcopy, bcmp, bzero \- memory operations
30 .SH SYNOPSIS
31 .LP
32 .nf
33 #include <strings.h>
34
35 \fBvoid\fR \fBbcopy\fR(\fBconst void *\fR\fR\fR1\fR, \fBvoid *\fR\fR\fR2\fR, \fBsize_t\fR
36 \fR
37 .LP
38 .nf
39 \fBint\fR \fBbcmp\fR(\fBconst void *\fR\fR\fR1\fR, \fBconst void *\fR\fR\fR2\fR, \fBsize_t\fR
40 \fR
41 .LP
42 \fBvoid\fR \fBbzero\fR(\fBvoid *\fR\fR\fR, \fBsize_t\fR \fR);
43 .fi
44
45 .SH DESCRIPTION
46 .sp
47 .LP
48 The \fBbcopy\fR, \fBbcmp\fR, and \fBbzero\fR functions operate as
49 efficiently as possible on memory areas (arrays of bytes bounded by a count,
50 not terminated by a null character). They do not check for the overflow of
51 any receiving memory area. These functions are similar to the
52 .Xr memcpy 3C ,
53 .Xr memcmp 3C ,
54 and
55 .Xr memset 3C
56 functions.

```

```

35 .Lp
36 The
37 .Fn bcopy
38 function copies
39 .Fa n
40 bytes from memory area
41 .Fa s1
42 to
43 .Fa s2 .
44 Copying between objects that overlap will take place correctly.
45 .Lp
46 The
47 .Fn bcmp
48 function compares the first
49 .Fa n
50 bytes of its arguments, returning 0 if they are identical and 1 otherwise. The
51 .Fn bcmp
52 function always returns 0 when
53 .Fa n
54 is 0.
55 .Lp
56 The
57 .Fn bzero
58 function sets the first
59 .Fa n
60 bytes in memory area
61 .Fn s
62 any receiving memory area. These functions are similar to the \fBmemcpy\fR,
63 \fBmemcmp\fR, and \fBmemset\fR functions described on the \fBmemory\fR(3C)
64 manual page.
65 .sp
66 .LP
67 The \fBbcopy\fR function copies \fR bytes from memory area \fR1 to
68 \fR2. Copying between objects that overlap will take place correctly.
69 .sp
70 .LP
71 The \fBbcmp\fR function compares the first \fR bytes of its arguments,
72 returning 0 if they are identical and 1 otherwise. The \fBbcmp\fR function
73 always returns 0 when \fR is 0.
74 .sp
75 .LP
76 The \fBbzero\fR function sets the first \fR bytes in memory area \fR
77 to 0.
78 .SH WARNINGS
79 The
80 .Fn bcopy
81 function takes parameters backwards from
82 .Fn memcmp .
83 See
84 .Xr memory 3C
85 .Sh INTERFACE STABILITY
86 .Sy Obsolete Standard .
87 .Sh MT-LEVEL
88 .Sy MT-Safe .
89 .Sh SEE ALSO
90 .Xr memory 3C ,
91 .Xr standards 5
92 .Sh STANDARDS
93 These interfaces were removed in
94 .St -p1003.1-2008 . The standard memory routines documented in
95 .Xr memory 3C
96 should be used instead.
97 .SH WARNINGS
98 .sp
99 .LP
100 The \fBbcopy\fR function takes parameters backwards from \fBmemcmp\fR. See

```

```
53 \fBmemory\fR(3C).
54 .SH ATTRIBUTES
55 .sp
56 .LP
57 See \fBattributes\fR(5) for descriptions of the following attributes:
58 .sp

60 .sp
61 .TS
62 box;
63 c | c
64 l | l .
65 ATTRIBUTE TYPE    ATTRIBUTE VALUE
66 -
67 Interface Stability    Standard
68 -
69 MT-Level              MT-Safe
70 .TE

72 .SH SEE ALSO
73 .sp
74 .LP
75 \fBmemory\fR(3C), \fBattributes\fR(5), \fBstandards\fR(5)
```

new/usr/src/man/man3c/dirfd.3c

1

2790 Sun Jul 27 18:01:30 2014

new/usr/src/man/man3c/dirfd.3c

opendir, dirfd are in XPG7

```
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7.Dd \"Jul 22, 2014\"
8.Dt DIRFD 3C
9.Os
10.Sh NAME
11.Nm dirfd
12.Nd get directory stream file descriptor
13.Sh SYNOPSIS
14.In dirent.h
15.Ft int
16.Fn dirfd \"DIR *dir\"
17.Sh DESCRIPTION
18.The
19.Fn dirfd
20.function returns the file descriptor associated with the
21.directory stream
22.Fa dir .
23.Lp
24.This file descriptor is the one used internally by the directory stream
25.operations. See
26.Xr opendir 3C ,
27.Xr closedir 3C ,
28.Xr readdir 3C ,
29.Xr rewinddir 3C ,
30.Xr seekdir 3C ,
31.and
32.Xr telldir 3C .
33.The file descriptor
34.is automatically closed when
35.Xr closedir 3C
36.is called for the directory stream
37.Fa dir
38.or when one of the
39.Xr exec 2
40.functions is called.
41.Lp
42.operations. See \fBopendir\fR(3C), \fBclosedir\fR(3C), \fBreaddir\fR(3C),
```

new/usr/src/man/man3c/dirfd.3c

2

```
27 \fBrewinddir\fR(3C), \fBseekdir\fR(3C), \fBtelldir\fR(3C). The file descriptor
28 is automatically closed when \fBclosedir()\fR is called for the directory
29 stream \fBfdir\fR or when one of the \fBexec\fR functions is called. See
30 \fBexec\fR(2).
31.sp
32.LP
33.The file descriptor can safely be used only by functions that do not depend on
34.or alter the file position, such as
35.Xr fstat 2
36.and
37.Xr fchdir .
38.Closing the file descriptor with
39.Xr close 2
40.or modifying the file position
41.or alter the file position, such as \fBfstat\fR(2) and \fBfchdir\fR(2).
42.Closing the file descriptor with \fBclose\fR(2) or modifying the file position
43.by means other than the directory stream operations listed above causes
44.undefined behavior to occur when one of the directory stream operations is
45.subsequently called with the directory stream
46.Fa dir .
47.Sh RETURN VALUES
48.Upon successful completion, the
49.Fn dirfd
50.function returns an open file
51.descriptor for the directory associated with the directory stream
52.Fa dir .
53.Sh ERRORS
54.subsequently called with the directory stream \fBfdir\fR.
55.SH RETURN VALUES
56.sp
57.LP
58.Upon successful completion, the \fBdirfd()\fR function returns an open file
59.descriptor for the directory associated with the directory stream \fBfdir\fR.
60.Sh ERRORS
61.sp
62.LP
63.There are no defined error returns. Passing an invalid directory stream as an
64.argument to the
65.Fn dirfd
66.function results in undefined behavior.
67.Sh USAGE
68.The
69.Fn dirfd
70.function is intended to be used to obtain a file descriptor
71.for use with the
72.Xr fchdir
73.function.
74.Sh INTERFACE STABILITY
75.Sy Standard .
76.Sh MT-LEVEL
77.Sy Safe .
78.Sh SEE ALSO
79.Xr close 2 ,
80.Xr exec 2 ,
81.Xr fchdir 2 ,
82.Xr fstat 2 ,
83.Xr closedir 3C ,
84.Xr opendir 3C ,
85.Xr readdir 3C ,
86.Xr rewinddir 3C ,
87.Xr seekdir 3C ,
88.Xr telldir 3C ,
89.Xr standards 5
```

```

91 .
92 .Sh STANDARDS
93 The
94 .Fn dirfd
95 function was introduced in
96 .St -p1003.1-2008 .
97 argument to the \fBdirfd()\fR function results in undefined behavior.
98 .SH USAGE
99 .sp
100 .LP
101 The \fBdirfd()\fR function is intended to be used to obtain a file descriptor
102 for use with the \fBfchdir()\fR function.
103 .SH ATTRIBUTES
104 .sp
105 .LP
106 See \fBattributes\fR(5) for descriptions of the following attributes:
107 .sp
108
109 .sp
110 .TS
111 box;
112 c | c
113 l | l .
114 ATTRIBUTE TYPE    ATTRIBUTE VALUE
115 -
116 Interface Stability    Committed
117
118 MT-Level              Safe
119 .TE
120
121 .SH SEE ALSO
122 .sp
123 .LP
124 \fBclose\fR(2), \fBexec\fR(2), \fBfchdir\fR(2), \fBfstat\fR(2),
125 \fBclosedir\fR(3C), \fBopendir\fR(3C), \fBreaddir\fR(3C), \fBrewinddir\fR(3C),
126 \fBseekdir\fR(3C), \fBtelldir\fR(3C), \fBattributes\fR(5)

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1

```
5314 Sun Jul 27 18:01:31 2014
new/usr/src/man/man3c/ecvt.3c
Minor markup tweaks (Sy instead of Nm).
fix incorrect standard citations
first round of POSIX 2008 stuff
```

```

21 .LP
22 .nf
23 \fBchar * \fR \fBfcvt \fR \fBdouble \fR \fIvalue \fR, \fBint \fR \fIindigit \fR, \fBint
24 \fBchar

```

2

```

26 .LP
27 .nf
28 \fBchar *\fR\fBgcvt\fR(\fBdouble\fR \fIvalue\fR, \fBint\fR \fIindigit\fR, \fBchar
29 \fI
31 .SH DESCRIPTION
32 .sp
33 .LP
34 The \fBecvt()\fR, \fBfcvt()\fR and \fBgcvt()\fR functions convert
35 floating-point numbers to null-terminated strings.
36 .SS "\fBecvt()\fR"
37 .sp
38 .LP
39 The \fBecvt()\fR function converts \fIvalue\fR to a null-terminated string of
40 \fIindigit\fR digits (where \fIindigit\fR is reduced to an unspecified limit
41 determined by the precision of a \fBdouble\fR) and returns a pointer to the
42 string. The high-order digit is non-zero, unless the value is 0. The
43 low-order digit is rounded. The position of the radix character relative to
44 the beginning of the string is stored in the integer pointed to by
45 \fIdecpt
46 .Fa decpt
47 the beginning of the string is stored in the integer pointed to by \fIdecpt\fR
48 (negative means to the left of the returned digits). The radix character is not
49 included in the returned string. If the sign of the result is negative, the
50 integer pointed to by
51 .Fa sign
52 is non-zero, otherwise it is 0.
53 .LP
54 integer pointed to by \fIsign\fR is non-zero, otherwise it is 0.
55 .sp
56 .LP
57 If the converted value is out of range or is not representable, the contents of
58 the returned string are unspecified.
59 .SS \fBfn fcvt
60 The
61 .Fn fcvt
62 function is identical to
63 .Fn ecvt
64 except that
65 .Fa ndigit
66 .SS "\fBfcvt()\fR"
67 .sp
68 .LP
69 The \fBfcvt()\fR function is identical to \fBecvt()\fR except that \fIindigit\fR
70 specifies the number of digits desired after the radix point. The total number
71 of digits in the result string is restricted to an unspecified limit as
72 determined by the precision of a
73 .Ft double .
74 .SS \fBfn gcvt
75 The
76 .Fn gcvt
77 function converts
78 .Fa value
79 to a null-terminated string
80 (similar to that of the
81 .Em %g
82 format of
83 .Xr printf 3C
84 in the array pointed to by
85 .Fa buf
86 and returns
87 .Fa buf .
88 It produces
89 .Fa ndigit
90 determined by the precision of a \fBdouble\fR.
91 .SS "\fBgcvt()\fR"
92 .sp
93 .LP

```

```

61 .LP
62 The \fBgcvt()\fR function converts \fIvalue\fR to a null-terminated string
63 (similar to that of the \fB%g\fR format of \fBprintf\fR(3C)) in the array
64 pointed to by \fIbuf\fR and returns \fIbuf\fR. It produces \fIindigit\fR
65 significant digits (limited to an unspecified value determined by the precision
66 of a
67 .Ft double )
68 in
69 .Em %f
70 if possible, or
71 .Em %e
72 (scientific notation)
73 otherwise. A minus sign is included in the returned string if
74 \fIvalue
75 is less than 0. A radix character is included in the returned string if
76 \fIvalue
77 is not a whole number. Trailing zeros are suppressed where
78 .Fa value
79 is not a whole number. The radix character is determined by the
80 .Dv LC_NUMERIC
81 category of the current locale. In the default, POSIX, locale, the period
82 .Pq Em \&.
83 is used for the radix character.
84 default locale, POSIX, is used.
85 .Sh RETURN VALUES
86 The
87 .Fn ecvt
88 and
89 .Fn fcvt
90 functions return a pointer to a null-terminated string of digits.
91 .LP
92 The
93 .Fn gcvt
94 function returns
95 .Fa buf .
96 .Sh ERRORS
97 of a \fBdouble\fR in \fB%f\fR if possible, or \fB%e\fR (scientific notation)
98 otherwise. A minus sign is included in the returned string if \fIvalue\fR is
99 less than 0. A radix character is included in the returned string if
100 \fIvalue\fR is not a whole number. Trailing zeros are suppressed where
101 \fIvalue\fR is not a whole number. The radix character is determined by the
102 current locale. If \fBsetlocale\fR(3C) has not been called successfully, the
103 default locale, POSIX, is used. The default locale specifies a period
104 (\fB\&\fR) as the radix character. The \fBLC_NUMERIC\fR category determines
105 the value of the radix character within the current locale.
106 .Sh RETURN VALUES
107 .sp
108 .LP
109 The \fBecvt()\fR and \fBfcvt()\fR functions return a pointer to a
110 null-terminated string of digits.
111 .sp
112 .LP
113 The \fBgcvt()\fR function returns \fIbuf\fR.
114 .Sh ERRORS
115 .sp
116 .LP
117 No errors are defined.
118 .Sh USAGE
119 The return values from
120 .Fn ecvt
121 and
122 .Fn fcvt
123 might point to
124 .Sh USAGE
125 .sp
126 .LP

```

```

90 The return values from \fBecvt()\fR and \fBfcvt()\fR might point to
121 thread-specific data that can be overwritten by subsequent calls to these
122 functions by the same thread.
123 .LP
124 Portable applications should use
125 .Xr sprintf 3C ,
126 which is mandated by
127 .St -isoC .
128 .Sh INTERFACE STABILITY
129 .Sy Obsolete Standard .
130 .Sh MT-LEVEL
131 .Sy Safe .
132 .Sh SEE ALSO
133 .Xr printf 3C ,
134 .Xr setlocale 3C
135 .Xr sprintf 3C ,
136 .Xr standards 5
137 .Sh STANDARDS
138 These functions were introduced in
139 .St -xpg4.2 .
140 They were obsoleted in
141 .St -p1003.1-2001
142 and removed from
143 .St -p1003.1-2008 .
144 .sp
145 .LP
146 For portability to implementations conforming to earlier versions of Solaris,
147 \fBsprintf\fR(3C) is preferred over this function.
148 .Sh ATTRIBUTES
149 .sp
150 .LP
151 See \fBattributes\fR(5) for descriptions of the following attributes:
152 .sp
153 .sp
154 .TS
155 box;
156 c | c
157 l | l .
158 ATTRIBUTE TYPE      ATTRIBUTE VALUE
159 _
160 Interface Stability      Standard
161 _
162 MT-Level                Safe
163 .TE
164 .sp
165 .Sh SEE ALSO
166 .sp
167 .LP
168 \fBprintf\fR(3C), \fBsetlocale\fR(3C), \fBsprintf\fR(3C), \fBattributes\fR(5),
169 \fBstandards\fR(5)

```

new/usr/src/man/man3c/ftime.3c

1

3956 Sun Jul 27 18:01:32 2014
new/usr/src/man/man3c/ftime.3c
Minor markup tweaks (Sy instead of Nm).
fix incorrect standard citations
first round of POSIX 2008 stuff

```
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10.Dd \"Jul 19, 2014\"
11.Dt FTIME 3C
12.Os
13.Sh NAME
14.Nm ftime
15.Nd get date and time
16.Sh SYNOPSIS
17.In sys/timeb.h
18.Ft int
19.Fn ftime \"struct timeb *tp\"
20.Sh DESCRIPTION
21.The
22.Fn ftime
23.function sets the
24.Fa time
25.and
26.Fa millitm
27.members of the
28.Ft timeb
29.structure pointed to by
30.Fa tp .
31.The structure is defined in
32.In sys/timeb.h
33.and contains the following members:
34.Bl -column \"unsigned short\" \"timezone\" -offset indent
35.It Ft time_t Ta Fa time ;
36.It Ft unsigned short Ta Fa millitm ;
37.It Ft short Ta Fa timezone ;
38.It Ft short Ta Fa dstflag ;
39.El
40.Lp
41.The
42.Fa time
43.and
44.Fa millitm
45.members contain the seconds and milliseconds
10.TH FTIME 3C \"Jul 24, 2002\"
11.SH NAME
12.ftime \- get date and time
13.SH SYNOPSIS
14.LP
15.nf
16.#include <sys/timeb.h>

18.fBint fR fBftime fR( fBstruct timeb * fR fIt p fR);
19.fi

21.SH DESCRIPTION
22.sp
```

new/usr/src/man/man3c/ftime.3c

2

```
23.LP
24.The fBftime() fR function sets the fBtime fR and fBmillitm fR members of the
25.fBtimeb fR structure pointed to by fIt p fR. The structure is defined in
26.<fBsys/timeb.h fR> and contains the following members:
27.sp
28.in +2
29.nf
30.time_t time;
31.unsigned short millitm;
32.short timezone;
33.short dstflag;
34.fi
35.in -2

37.sp
38.LP
39.The fBtime fR and fBmillitm fR members contain the seconds and milliseconds
46.portions, respectively, of the current time in seconds since 00:00:00 UTC
47.(Coordinated Universal Time), January 1, 1970.
48.Lp
49.The
50.Fa timezone
51.member contains the local time zone. The
52.Fa dstflag
53.member contains a flag that, if non-zero, indicates that Daylight Saving Time
42.sp
43.LP
44.The fBtimezone fR member contains the local time zone. The fBdstflag fR
45.member contains a flag that, if non-zero, indicates that Daylight Saving time
54.applies locally during the appropriate part of the year.
55.Lp
56.The contents of the
57.Fa timezone
58.and
59.Fa dstflag
60.members of
61.Fa tp
62.after a call to
63.Fn ftime
64.are unspecified.
65.Sh RETURN VALUES
66.Rv -std
67.Sh ERRORS
47.sp
48.LP
49.The contents of the fBtimezone fR and fBdstflag fR members of fIt p fR after
50.a call to fBftime() fR are unspecified.
51.Sh RETURN VALUES
52.sp
53.LP
54.Upon successful completion, the fBftime() fR function returns fB0 fR.
55.Otherwise fB( mil fR is returned.
56.Sh ERRORS
57.sp
58.LP
68.No errors are defined.
69.Sh USAGE
70.Portable applications should use either
71.Xr time 2 ,
72.or, if sub-second precision is required,
73.Xr clock_gettime 3C .
74.Lp
60.Sh USAGE
61.sp
62.LP
63.For portability to implementations conforming to earlier versions of this
```

```

64 document, \fBtime\fR(2) is preferred over this function.
65 .sp
66 .LP
67 The millisecond value usually has a granularity greater than one due to the
68 resolution of the system clock. Depending on any granularity (particularly a
69 granularity of one) renders code non-portable.
70 .Sh INTERFACE STABILITY
71 .Sy Obsolete Standard .
72 .Sh MT-LEVEL
73 .Sy Safe .
74 .Sh SEE ALSO
75 .Xr date 1 ,
76 .Xr time 2 ,
77 .Xr clock_gettime 3C ,
78 .Xr ctime 3C ,
79 .Xr gettimeofday 3C ,
80 .Xr timezone 4 ,
81 .Xr standards 5
82 .Sh STANDARDS
83 The
84 .Fn ftime
85 function was introduced in
86 .St -xpg4.2 .
87 It was subsequently obsoleted in
88 .St -p1003.1-2001
89 and removed from
90 .St -p1003.1-2008 .
91 .SH ATTRIBUTES
92 .sp
93 .LP
94 See \fBattributes\fR(5) for descriptions of the following attributes:
95 .sp
96
97 .sp
98 .TS
99 box;
100 c | c
101 l | l .
102 ATTRIBUTE TYPE    ATTRIBUTE VALUE
103 _
104 Interface Stability    Standard
105 .TE
106
107 .SH SEE ALSO
108 .sp
109 .LP
110 \fBdate\fR(1), \fBtime\fR(2), \fBctime\fR(3C), \fBgettimeofday\fR(3C),
111 \fBtimezone\fR(4), \fBattributes\fR(5), \fBstandards\fR(5)

```

3392 Sun Jul 27 18:01:32 2014
 new/usr/src/man/man3c/getwd.3c
 Minor markup tweaks (Sy instead of Nm).
 first round of POSIX 2008 stuff

```

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11 .Dd \"Jul 21, 2014\"
12 .Dt GETWD 3C
13 .Os
14 .Sh NAME
15 .Nm getwd
16 .Nd get current working directory pathname
17 .Sh SYNOPSIS
18 .In unistd.h
19 .Ft \"char *\"
20 .Fn getwd \"char *path_name\"
21 .Sh DESCRIPTION
22 The
23 .Fn getwd
24 function determines an absolute pathname of the current
25 working directory of the calling process, and copies that pathname into the
26 array pointed to by the
27 .Fa path_name
28 argument.
29 .Lp
30 array pointed to by the \fIpath_name\fR argument.
31 .sp
32 .Lp
33 If the length of the pathname of the current working directory is greater than
34 .Pq Dv PATH_MAX + 1
35 including the null byte,
36 .Fn getwd
37 fails and returns a null pointer.
38 .Sh RETURN VALUES
39 (\fIPATH_MAX\fR + 1) including the null byte, \fBgetwd()\fR fails and returns a
40 null pointer.
41 .Sh RETURN VALUES
42 .sp
43 .Lp
44 Upon successful completion, a pointer to the string containing the absolute
45 pathname of the current working directory is returned. Otherwise,

```

```

37 .Fn getwd
38 returns a null pointer and the contents of the array pointed to by
39 .Fa path_name
40 are undefined.
41 .Sh ERRORS
42 \fBgetwd()\fR returns a null pointer and the contents of the array pointed to
43 by \fIpath_name\fR are undefined.
44 .Sh ERRORS
45 .sp
46 .Lp
47 No errors are defined.
48 .Sh USAGE
49 .Sh USAGE
50 .sp
51 .Lp
52 For portability to implementations conforming to versions of the X/Open
53 Portability Guide prior to
54 .St -xpg4.2
55 or after
56 .St -p1003.1-2008 ,
57 .Xr getcwd 3C
58 is preferred over this function.
59 .Sh INTERFACE STABILITY
60 .Sy Obsolete Standard .
61 .Sh SEE ALSO
62 getcwd 3C ,
63 standards 5
64 .Sh STANDARDS
65 The
66 .Fn getwd
67 interface was introduced in
68 .Bx 4.0
69 and
70 .St -xpg4.2 .
71 It was removed in
72 .St -p1003.1-2008 .
73 Portability Guide prior to SUS, \fBgetcwd\fR(3C) is preferred over this
74 function.
75 .Sh ATTRIBUTES
76 .sp
77 .Lp
78 See \fBattributes\fR(5) for descriptions of the following attributes:
79 .sp
80 .sp
81 .TS
82 box;
83 c | c
84 l | l .
85 ATTRIBUTE TYPE    ATTRIBUTE VALUE
86 -
87 Interface Stability    Standard
88 .TE
89 .Sh SEE ALSO
90 .sp
91 .Lp
92 \fBgetcwd\fR(3C), \fBattributes\fR(5), \fBstandards\fR(5)

```

3229 Sun Jul 27 18:01:33 2014
 new/usr/src/man/man3c/index.3c
 Minor markup tweaks (Sy instead of Nm).
 first round of POSIX 2008 stuff

```

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10 .Dd \"Jul 20, 2014\"
11 .Dt INDEX 3C
12 .Os
13 .Sh NAME
14 .Nm index, rindex
15 .Nd locate character in string
16 .Sh SYNOPSIS
17 .In strings.h
18 .Ft char *
19 .Fn index \"const char *s\" \"int c\"
20 .Ft char *
21 .Fn rindex \"const char *s\" \"int c\"
22 .Sh DESCRIPTION
23 The
24 .Fn index
25 and
26 .Fn rindex
27 functions operate on null-terminated strings.
28 .Lp
29 The
30 .Fn index
31 function returns a pointer to the first occurrence of
32 character
33 .Fa c
34 in string
35 .Fa s .
36 .Lp
37 The
38 .Fn rindex
39 function returns a pointer to the last occurrence of
40 character
41 .Fa c
42 in string
43 .Fa s .
44 .Lp
45 Both
46 .Fn index
47 and
48 .Fa rindex
49 return a null pointer if
50 .Fa c
51 does
52 .TH INDEX 3C \"Jul 24, 2002\"
53 .Sh NAME
54 index, rindex \- string operations
55 .Sh SYNOPSIS
56 .Lp
57 .nf
58 #include <strings.h>
59
60 \fBchar *\fR\fR\fR\fR\fR(\fR\fR\fR\fR\fR const char *\fR\fR\fR\fR\fR, \fR\fR\fR\fR\fR \fR\fR\fR\fR\fR);

```

```

19 .fi
20
21 .LP
22 .nf
23 \fBchar *\fR\fR\fR\fR\fR(\fR\fR\fR\fR\fR const char *\fR\fR\fR\fR\fR, \fR\fR\fR\fR\fR \fR\fR\fR\fR\fR);
24 .fi
25
26 .SH DESCRIPTION
27 .sp
28 .LP
29 The \fBindex()\fR and \fBrindex()\fR functions operate on null-terminated
30 strings.
31 .sp
32 .LP
33 The \fBindex()\fR function returns a pointer to the first occurrence of
34 character \fRic\fR in string \fRis\fR.
35 .sp
36 .LP
37 The \fBrindex()\fR function returns a pointer to the last occurrence of
38 character \fRic\fR in string \fRis\fR.
39 .sp
40 .LP
41 Both \fBindex()\fR and \fBrindex()\fR return a null pointer if \fRic\fR does
42 not occur in the string. The null character terminating a string is considered
43 to be part of the string.
44 .Sh USAGE
45 The
46 .Xr strchr 3C
47 and
48 .Xr strrchr 3C
49 should be used in portable applications; those functions are specified in
50 .St -isoC
51 whereas these are not.
52 .Sh INTERFACE STABILITY
53 .Sy Obsolete standard .
54 .Sh MT-LEVEL
55 .Sy Async-Signal-Safe .
56 .Sh SEE ALSO
57 .Xr bstring 3C ,
58 .Xr malloc 3C ,
59 .Xr string 3C ,
60 .Xr standards 5
61 .Sh STANDARDS
62 These functions were part of
63 .At v6 ,
64 were added in
65 .St -p1003.1-2001 ,
66 and subsequently removed from
67 .St -p1003.1-2008 .
68 .SH USAGE
69 .sp
70 .LP
71 On most modern computer systems, you can \fBinot\fR use a null pointer to
72 indicate a null string. A null pointer is an error and results in an abort of
73 the program. If you wish to indicate a null string, you must use a pointer
74 that points to an explicit null string. On some machines and with some
75 implementations of the C programming language, a null pointer, if dereferenced,
76 would yield a null string. Though often used, this practice is not always
77 portable. Programmers using a null pointer to represent an empty string should
78 be aware of this portability issue. Even on machines where dereferencing a
79 null pointer does not cause an abort of the program, it does not necessarily
80 yield a null string.
81 .SH ATTRIBUTES
82 .sp
83 .LP
84 See \fBattributes\fR(5) for descriptions of the following attributes:

```

```
61 .sp
63 .sp
64 .TS
65 box;
66 c | c
67 l | l .
68 ATTRIBUTE TYPE  ATTRIBUTE VALUE
69 -
70 Interface Stability      Standard
71 .TE

73 .SH SEE ALSO
74 .sp
75 .LP
76 \fBbstring\fR(3C), \fBmalloc\fR(3C), \fBstring\fR(3C), \fBattributes\fR(5),
77 \fBstandards\fR(5)
```

new/usr/src/man/man3c/makecontext.3c

1

```
*****
6656 Sun Jul 27 18:01:33 2014
new/usr/src/man/man3c/makecontext.3c
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wcsasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
More markup tweaks.
Minor markup tweaks (Sy instead of Nm).
fix incorrect standard citations
first round of POSIX 2008 stuff
*****
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11 .Dd \"Jul 14, 2014\"
12 .Dt MAKECONTEXT 3C
13 .Os
14 .Sh NAME
15 .Nm makecontext, swapcontext
16 .Nd manipulate user contexts
17 .Sh SYNOPSIS
18 .In ucontext.h
19 .Ft void
20 .Fn makecontext \"ucontext_t *ucp\" \"void *(lp*func*(rp)*(lp*(rp, int argc, ...
21 .Ft int
22 .Fn swapcontext \"ucontext_t *restrict oucp\" \"const ucontext_t *restrict ucp\"
23 .Sh DESCRIPTION
24 The
25 .Fn makecontext
26 function modifies the context specified by
27 .Fa ucp ,
28 which has been initialized using
29 .Xr getcontext 2 .
30 When this context is
31 resumed using
32 .Fn swapcontext
33 or
34 .Xr setcontext 2 ,
35 execution continues by calling the function
36 .Fa func ,
37 passing it the arguments that follow
38 .Fa argc
39 in the
40 .Fn makecontext
41 call. The value of
42 .Fa argc
43 must match the number of pointer-sized integer arguments passed to
44 .Fn func ,
45 otherwise the behavior is undefined.
46 .Lp
47 Before a call is made to
48 .Fn makecontext ,
49 the context being modified should
50 .TH MAKECONTEXT 3C \"Mar 8, 2004\"
51 .Sh NAME
52 makecontext, swapcontext \- manipulate user contexts
53 .Sh SYNOPSIS
54 .Lp
55 .nf
```

new/usr/src/man/man3c/makecontext.3c

2

```
16 #include <ucontext.h>
17
18 \fBvoid\fR \fBmakecontext\fR(\fBucontext_t * \fR\fIucp\fR, \fBvoid (*\fR\fIfunc\fR
19 .fi
20
21 .LP
22 .nf
23 \fBint\fR \fBswapcontext\fR(\fBucontext_t *restrict\fR \fIoucp\fR,
24 \fBconst ucontext_t *restrict\fR \fIucp\fR);
25 .fi
26
27 .SH DESCRIPTION
28 .sp
29 .LP
30 The \fBmakecontext()\fR function modifies the context specified by \fIucp\fR,
31 which has been initialized using \fBgetcontext\fR(2). When this context is
32 resumed using \fBswapcontext()\fR or \fBsetcontext\fR(2), execution continues
33 by calling the function \fIfunc\fR, passing it the arguments that follow
34 \fIargc\fR in the \fBmakecontext()\fR call. The value of \fIargc\fR must match
35 the number of pointer-sized integer arguments passed to \fIfunc\fR, otherwise
36 the behavior is undefined.
37 .sp
38 .LP
39 Before a call is made to \fBmakecontext()\fR, the context being modified should
40 have a stack allocated for it. The stack is assigned to the context by
41 initializing the
42 .Fa uc_stack
43 member.
44 .Lp
45 The
46 .Fa uc_link
47 member is used to determine the context that will be resumed
48 when the context being modified by
49 .Fn makecontext
50 returns. The
51 .Fa uc_link
52 member should be initialized prior to the call to
53 .Fn makecontext .
54 If the
55 .Fa uc_link
56 member is initialized to
57 .Dv NULL ,
58 the thread executing
59 .Fa func
60 will exit when
61 .Fa func
62 returns. See
63 .Xr pthread_exit 3C .
64 .Lp
65 The
66 .Fn swapcontext
67 function saves the current context in the context
68 structure pointed to by
69 .Fa oucp
70 and sets the context to the context
71 structure pointed to by
72 .Fa ucp .
73 .Lp
74 If the
75 .Fa ucp
76 or
77 .Fa oucp
78 argument points to an invalid address, the
79 behavior is undefined and
80 .Va errno
81 may be set to
```

```

91 .Er EFAULT .
92 .Sh RETURN VALUES
93 .Rv -std swapcontext
94 .Sh EXAMPLES
95 .Ss Example 1
96 The following example illustrates execution context on a stack whose memory was
97 allocated using
98 .Xr mmap 2 :
99 .Bd -literal -offset indent
41 initializing the \fBuc_stack\fR member.
42 .sp
43 .LP
44 The \fBuc_link\fR member is used to determine the context that will be resumed
45 when the context being modified by \fBmakecontext()\fR returns. The
46 \fBuc_link\fR member should be initialized prior to the call to
47 \fBmakecontext()\fR. If the \fBuc_link\fR member is initialized to \fBNULL\fR,
48 the thread executing \fBfunc\fR will exit when \fBfunc\fR returns. See
49 \fBpthread_exit\fR(3C).
50 .sp
51 .LP
52 The \fBswapcontext()\fR function saves the current context in the context
53 structure pointed to by \fBucp\fR and sets the context to the context
54 structure pointed to by \fBucp2\fR.
55 .sp
56 .LP
57 If the \fBucp2\fR or \fBucp\fR argument points to an invalid address, the
58 behavior is undefined and \fBerrno\fR may be set to \fBEFAULT\fR.
59 .SH RETURN VALUES
60 .sp
61 .LP
62 On successful completion, \fBswapcontext()\fR returns \fB0\fR. Otherwise,
63 \fB-1\fR is returned and \fBerrno\fR is set to indicate the error.
64 .SH ERRORS
65 .sp
66 .LP
67 The \fBswapcontext()\fR function will fail if:
68 .sp
69 .ne 2
70 .na
71 \fB\{BENOMEM\}\fR
72 .ad
73 .RS 10n
74 The \fBucp2\fR argument does not have enough stack left to complete the
75 operation.
76 .RE

78 .sp
79 .LP
80 The \fBswapcontext()\fR function may fail if:
81 .sp
82 .ne 2
83 .na
84 \fB\{BEFAULT\}\fR
85 .ad
86 .RS 10n
87 The \fBucp2\fR or \fBucp\fR argument points to an invalid address.
88 .RE

90 .SH EXAMPLES
91 .LP
92 \fBExample 1\fR \fRAlternate execution context on a stack whose memory was
93 allocated using \fBmmap()\fR.
94 .sp
95 .in +2
96 .nf
100 #include <stdio.h>

```

```

101 #include <ucontext.h>
102 #include <sys/mman.h>

104 void
105 assign(long a, int *b)
106 {
107     *b = (int)a;
108 }
109 unchanged_portion_omitted_
134 .Ed
135 .Sh ERRORS
136 The
137 .Fn swapcontext
138 function will fail if:
139 .Bl -tag -width Er
140 .It Er ENOMEM
141 The
142 .Fa ucp
143 argument does not have enough stack left to complete the operation.
144 .El
145 .Lp
146 The
147 .Fn swapcontext
148 function may fail if:
149 .Bl -tag -width Er
150 .It Er EFAULT
151 The
152 .Fa ucp
153 or
154 .Fa oucp
155 argument points to an invalid address.
156 .El
157 .Sh USAGE
131 .fi
132 .in -2

134 .SH USAGE
135 .sp
136 .LP
158 These functions are useful for implementing user-level context switching
159 between multiple threads of control within a process (co-processing). More
160 effective multiple threads of control can be obtained by using native support
161 for multithreading. See
162 .Xr pthreads 5 .
163 .Sh INTERFACE STABILITY
164 .Sy Obsolete Standard .
165 .Sh MT-LEVEL
166 .Sy MT-Safe .
167 .Sh SEE ALSO
168 .Xr mmap 2 ,
169 .Xr getcontext 2 ,
170 .Xr sigaction 2 ,
171 .Xr sigprocmask 2 ,
172 .Xr pthread_exit 3C ,
173 .Xr ucontext.h 3HEAD ,
174 .Xr standards 5 ,
175 .Xr pthreads 5
176 .Sh NOTES
177 The semantics of the
178 .Fa uc_stack
179 member of the
180 .Ft ucontext_t
181 structure have changed as they apply to inputs to
182 .Fn makecontext .
183 Prior to Solaris 10, the
184 .Fa ss_sp

```

```

185 member of the
186 .Fa uc_stack
187 structure represented the high
188 for multithreading. See \fBthreads\fR(5).
189 .SH ATTRIBUTES
190 .sp
191 .LP
192 See \fBattributes\fR(5) for descriptions of the following attributes:
193 .sp
194 .TS
195 box;
196 c | c
197 l | l .
198 ATTRIBUTE TYPE      ATTRIBUTE VALUE
199 _
200 Interface Stability      Standard
201 _
202 MT-Level                MT-Safe
203 .TE
204
205 .SH SEE ALSO
206 .sp
207 .LP
208 \fBmmap\fR(2), \fBgetcontext\fR(2), \fBsigaction\fR(2), \fBsigprocmask\fR(2),
209 \fBpthread_exit\fR(3C), \fBucontext.h\fR(3HEAD), \fBattributes\fR(5),
210 \fBstandards\fR(5), \fBthreads\fR(5)
211 .SH NOTES
212 .sp
213 .LP
214 The semantics of the \fBucontext_t\fR member of the \fBucontext_t\fR structure
215 have changed as they apply to inputs to \fBmakecontext()\fR. Prior to Solaris
216 10, the \fBss_sp\fR member of the \fBucontext_t\fR structure represented the high
217 memory address of the area reserved for the stack. The \fBss_sp\fR member now
218 represents the base (low memory address), in keeping with other uses of
219 .Fa ss_sp .
220 .LP
221 This change in the meaning of
222 .Fa ss_sp
223 is now the default behavior. The
224 .Dv -D__MAKECONTEXT_V2_SOURCE
225 compilation flag used in Solaris 9 update
226 \fBss_sp\fR.
227 .sp
228 .LP
229 This change in the meaning of \fBss_sp\fR is now the default behavior. The
230 \fB-D__MAKECONTEXT_V2_SOURCE\fR compilation flag used in Solaris 9 update
231 releases to access this behavior is obsolete.
232 .LP
233 .sp
234 .LP
235 Binary compatibility has been preserved with releases prior to Solaris 10.
236 Before recompiling, applications that use
237 .Fn makecontext
238 must be updated
239 to reflect this behavior change.
240 .LP
241 Portable applications should not use this function. Instead, applications
242 should use
243 .Xr pthreads 5
244 routines.
245 .LP
246 Note that the definition of
247 .Fn makecontext
248 violates

```

```

213 .St -isoC .
214 There is no way to declare this function that does not violate that
215 standard.
216 .Sh STANDARDS
217 This function was introduced in
218 .St -xpg4.2 ,
219 and subsequently removed from
220 .St -p1003.1-2008 .
221 Before recompiling, applications that use \fBmakecontext()\fR must be updated
222 to reflect this behavior change. The example below demonstrates a typical change
223 that must be applied:
224 .sp
225 .in +2
226 .nf
227 --- example1_s9.c      Thu Oct  3 11:58:17 2002
228 +++ example1.c      Thu Jun 27 13:28:16 2002
229 @@ -27,12 +27,9 @@
230      uc.uc_stack.ss_sp = mmap(0, sz,
231          PROT_READ | PROT_WRITE | PROT_EXEC,
232          MAP_PRIVATE | MAP_ANON, -1, 0);
233 -      uc.uc_stack.ss_sp = (char *)uc.uc_stack.ss_sp + sz - 8;
234      uc.uc_stack.ss_size = sz;
235      uc.uc_stack.ss_flags = 0;
236
237      uc.uc_link = &back
238
239      makecontext(&uc, assign, 2, 100L, &value);
240 .fi
241 .in -2

```

new/usr/src/man/man3c/mktemp.3c

1

3972 Sun Jul 27 18:01:33 2014

new/usr/src/man/man3c/mktemp.3c

fix incorrect standard citations

```
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12.Dd \"Jul 21, 2014\"
13.Dt MKTEMP 3C
14.Os
15.Sh NAME
16.Nm mktemp
17.Nd make a unique file name from a template
18.Sh SYNOPSIS
19.In stdlib.h
20.Ft \"char **
21.Fn mktemp \"char *template\"
22.Sh DESCRIPTION
23.The
24.Fn mktemp
25.function replaces the contents of the string pointed to by
26.Fa template
27.with a unique file name, and returns
28.Fa template .
29.The string in
30.Fa template
31.should look like a file name with six trailing
32.So X Sc Ns s ;
33.Fn mktemp
34.will replace the
35.So X Sc Ns s
36.with a character string that can be used
12.TH MKTEMP 3C \"Sep 15, 2004\"
13.SH NAME
14.mktemp \|- make a unique file name from a template
15.SH SYNOPSIS
16.LP
17.nf
18.#include <stdlib.h>

20.fBchar *fRfBmktemp(fR(fBchar *fRfItemplatefR);
21.fi

23.SH DESCRIPTION
24.sp
25.LP
26.The fBmktemp()fR function replaces the contents of the string pointed to by
27.fItemplatefR with a unique file name, and returns fItemplatefR. The string
28.in fItemplatefR should look like a file name with six trailing 'X's;
29.fBmktemp()fR will replace the 'X's with a character string that can be used
37.to create a unique file name. Only 26 unique file names per thread can be
38.created for each unique
39.Fa template .
40.Sh RETURN VALUES
41.The
42.Fn mktemp
```

new/usr/src/man/man3c/mktemp.3c

2

```
43.function returns a pointer to the
44.Fa template
45.on success and
46.Dv NULL
47.if unique name cannot be created.
48.Sh EXAMPLES
49.Ss Example 1 Generate a filename.
31.created for each unique fItemplatefR.
32.SH RETURN VALUES
33.sp
34.LP
35.The fBmktemp()fR function returns a pointer to the fItemplatefR on success
36.and fBNULLfR if unique name cannot be created.
37.SH ERRORS
38.sp
39.LP
40.No errors are defined.
41.SH EXAMPLES
42.LP
43.fBExample 1 fRGenerate a filename.
44.sp
45.LP
50.The following example replaces the contents of the "template" string with a
51.10-character filename beginning with the characters "file" and returns a
52.pointer to the "template" string that contains the new filename.
53.Bd -literal -offset indent

50.sp
51.in +2
52.nf
54.#include <stdlib.h>
55.&...
56.char template[] = "/tmp/fileXXXXXX";
57.char *ptr;
58.ptr = mktemp(template);
59.Ed
60.Sh ERRORS
61.No errors are defined.
62.Sh SECURITY
58.fi
59.in -2

61.SH USAGE
62.sp
63.LP
63.Between the time a pathname is created and the file opened, it is possible for
64.some other process to create a file with the same name. The
65.Xr mkstemp 3C
65.some other process to create a file with the same name. The fBmkstempfR(3C)
66.function avoids this problem and is preferred over this function.
67.Sh INTERFACE STABILITY
68.Sy Obsolete Standard .
69.Sh MT-LEVEL
70.Sy Safe .
71.Sh SEE ALSO
72.Xr mkstemp 3C ,
73.Xr tmpfile 3C ,
74.Xr tmpnam 3C ,
75.Xr standards 5
76.Sh STANDARDS
77.The
78.Fn mktemp
79.function was introduced in
80.At v7
81.and subsequently standardized in
82.St -xpg4.2 .
```

```
83 It was obsoleted in
84 .St -p1003.1-2001 ,
85 and removed from
86 .St -p1003.1-2008 .
87 .SH ATTRIBUTES
88 .sp
89 .LP
90 See \fBattributes\fR(5) for descriptions of the following attributes:
91 .sp

92 .sp
93 .TS
94 box;
95 c | c
96 l | l .
97 .SH ATTRIBUTE TYPE ATTRIBUTE VALUE
98 .
99 Interface Stability      Standard
100 .
101 MT-Level                Safe
102 .TE

103 .SH SEE ALSO
104 .sp
105 .LP
106 \fBmkstemp\fR(3C), \fBtmpfile\fR(3C), \fBtmpnam\fR(3C), \fBattributes\fR(5),
107 \fBstandards\fR(5)
```


new/usr/src/man/man3c/newlocale.3c

1

```
*****
4466 Sun Jul 27 18:01:34 2014
new/usr/src/man/man3c/newlocale.3c
Add locale.h ref
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wcscasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
Note standards conformance for newlocale, convert to mdocml.
*****
1  \" te
1  \"
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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
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13 \" Copyright 2014 Garrett D'Amore <garrett@damore.org>
14 \"
15 .Dd \"Jul 23, 2014\"
16 .Dt NEWLOCALE 3C
17 .Os
18 .Sh NAME
19 .Nm duplocale ,
20 .Nm freelocale ,
21 .Nm newlocale
22 .Nd create, duplicate, and destroy locale objects
23 .Sh SYNOPSIS
24 .In locale.h
25 .
26 .Ft locale_t
27 .Fo newlocale
28 .Fa \"int category_mask\"
29 .Fa \"const char *locale\"
30 .Fa \"locale_t base\"
31 .Fc
32 .
33 .Ft locale_t
34 .Fo duplocale
35 .Fa \"locale_t loc\"
36 .Fc
37 .
38 .Ft void
39 .Fo freelocale
40 .Fa \"locale_t loc\"
41 .Fc
42 .Sh DESCRIPTION
43 These functions manipulate locale objects that can be used with
44 .Xr uselocale 3C
16 .TH NEWLOCALE 3C \"Jun 23, 2014\"
17 .SH NAME
18 duplocale, freelocale, newlocale \- create, duplicate, and destroy locale object
19 .SH SYNOPSIS
20 .LP
21 .nf
22 #include <locale.h>

24 \fBlocale_t\fR \fBnewlocale\fR(\fBint\fR \fBcategory_mask\fR, \fBconst char *\fR
25 \fBlocale_t\fR \fBibase\fR);
26 .fi
27 .LP
```

new/usr/src/man/man3c/newlocale.3c

2

```
28 .nf
29 \fBlocale_t\fR \fBduplocale\fR(\fBlocale_t\fR \fBiloc\fR);
30 .fi
31 .LP
32 .nf
33 \fBvoid\fR \fBfreelocale\fR(\fBlocale_t\fR \fBiloc\fR);
34 .fi
35 .SH DESCRIPTION
36 .LP
37 These functions manipulate locale objects that can be used
38 .BR uselocale (3C)
45 and functions that take arguments of type
46 .Vt locale_t .
47 .Lp
48 The
49 .Fn newlocale
50 function
40 .BR locale_t .
41 .LP
42 The function
43 .B newlocale()
51 can be used to create a new locale object. It can also be used to modify an
52 existing locale object; the new locale object will be a replacement for the
45 existing locale object, the new locale object will be a replacement for the
53 modified locale object. To create a new locale, the argument
54 .Fa base
47 .I base
55 should be passed the special argument
56 .Po Vt locale_t Pc 0.
49 .RB ( locale_t )0.
57 This will use a copy of the current global locale as a starting point. To modify
58 an existing locale object, it should be passed in as the argument
59 .Fa base .
52 .IR base .
60 The new locale object is constructed by taking the categories specified in
61 .Fa category_mask
54 .I category_mask
62 from the locale specified by the string
63 .Fa locale ,
56 .IR locale ,
64 and filling in the remaining categories from the locale
65 .Fa base .
58 .IR base .
66 When
67 .Fn newlocale
60 .B newlocale()
68 returns, callers must no longer use
69 .Fa base .
70 They should assume that
71 .Fn freelocale
72 has been called on it.
73 .Lp
74 In addition to locales defined on the system, the
62 .IR base
63 and assume that
64 .BR freelocale (3C)
65 has been called on it. In addition to locales defined on the system, the
75 following three locales may always be passed in as the string
76 .Fa locale :
77 .Bl -tag -offset indent -width Dq
78 .It \"C\"
67 .IR locale :
68 .TP
69 \"C\"
79 Specifies the traditional UNIX system behavior.
80 .It \"POSIX\"
```

```

71 .TP
72 "POSIX"
81 An alternate name fo the locale "C".
82 .It \\\"\\\"
74 .TP
75 ""
83 Indicates that the locale should be processed based in the values in the
84 environment. See
85 .Xr setlocale 3C
78 .BR setlocale (3C)
86 and
87 .Xr environ 5
80 .BR environ (5)
88 for more information.
89 .El
90 .Lp
82 .LP
91 The value of
92 .Fa category_mask
84 .I category_mask
93 is a bitwise-inclusive or of the following macros which correspond to categories
94 as defined in
95 .Xr locale 5
87 .BR locale (5)
96 and
97 .Xr environ 5 :
98 .Bl -tag -offset indent -width Dv
99 .It Dv LC_CTYPE_MASK
89 .BR environ (5):
90 .TP
91 .B LC_CTYPE_MASK
100 Character classification and case conversion.
101 .It Dv LC_NUMERIC_MASK
93 .TP
94 .B LC_NUMERIC_MASK
102 Numeric formatting.
103 .It Dv LC_TIME_MASK
96 .TP
97 .B LC_TIME_MASK
104 Date and time formatting.
105 .It Dv LC_COLLATE_MASK
99 .TP
100 .B LC_COLLATE_MASK
106 Collation order.
107 .It Dv LC_MONETARY_MASK
102 .TP
103 .B LC_MONETARY_MASK
108 Monetary formatting.
109 .It Dv LC_MESSAGES_MASK
105 .TP
106 .B LC_MESSAGES_MASK
110 Formats of informative and diagnostic messages and interactive responses.
111 .It Dv LC_ALL_MASK
108 .TP
109 .B LC_ALL_MASK
112 Mask of all categories.
113 .El
114 .Lp
115 .The
116 .Fn duplocale
117 function duplicates the locale object specified by
118 .Fa loc .
111 .LP
112 The function
113 .B duplocale()
114 duplicates the locale object specified by

```

```

115 .IR loc .
119 If the locale object passed is
120 .Dv LC_GLOBAL_LOCALE ,
121 .Fn duplocale
117 .BR LC_GLOBAL_LOCALE ,
118 .B duplocale()
122 creates a copy of the current global locale as defined through calls to
123 .Xr setlocale 3C .
124 .Lp
125 .The
126 .Fn freelocale
127 function removes and releases all resources associated with the locale object
128 .Fa loc .
120 .BR setlocale (3C).
121 .LP
122 The function
123 .B freelocale()
124 removes and releases all resources associated with the locale object
125 .IR loc .
129 Programs must not call
130 .Fn freelocale
127 .B freelocale()
131 on
132 .Dv LC_GLOBAL_LOCALE .
133 .Sh RETURN VALUES
129 .BR LC_GLOBAL_LOCALE .
130 .SH RETURN VALUES
131 .LP
134 On success, the functions
135 .Fn newlocale
133 .B newlocale()
136 and
137 .Fn duplocale
135 .B duplocale()
138 return a new locale object that can be used with functions that take a
139 .Vt locale_t .
137 .BR locale_t .
140 Locale objects created this way should be freed with
141 .Fn freelocale .
139 .BR freelocale() .
142 On error, the functions
143 .Fn newlocale
141 .B newlocale()
144 and
145 .Fn duplocale
143 .B duplocale()
146 return
147 .Po Vt locale_t Pc 0
145 .BR (locale_t) 0
148 and
149 .Va errno
147 .B errno
150 is set to indicate the error. The
151 .Fn freelocale
149 .B freelocale()
152 function does not set
153 .Va errno .
154 .Sh ERRORS
151 .B errno.
152 .SH ERRORS
153 .LP
155 The
156 .Fn newlocale
155 .B newlocale()
157 and
158 .Fn duplocale

```

```

157 .B duplocale()
159 functions will fail if:
160 .Bl -tag -width Er
161 .It Er ENOMEM
159 .TP
160 .B ENOMEM
162 Insufficient memory was available to create the locale object or to load the
163 requested locale data.
164 .El
165 .Lp
163 .LP
166 The
167 .Fn newlocale
165 .B newlocale()
168 function will fail if:
169 .Bl -tag -width Er
170 .It Er EINVAL
167 .TP
168 .B EINVAL
171 An unknown bit is specified in
172 .Fa category_mask .
173 .It Er ENOENT
170 .IR category_mask .
171 .TP
172 .B ENOENT
174 Locale data was not found for a category specified in
175 .Fa category_mask .
176 .El
177 .Sh INTERFACE STABILITY
178 .Sy Standard .
179 .Sh MT-LEVEL
180 .Sy MT-Safe .
181 .Sh SEE ALSO
182 .Xr locale 1 ,
183 .Xr setlocale 3C ,
184 .Xr uselocale 3C ,
185 .Xr locale.h 3HEAD ,
186 .Xr environ 5 ,
187 .Xr locale 5
188 .Sh STANDARDS
189 The
190 .Fn newlocale ,
191 .Fn duplocale ,
192 and
193 .Fn freelocale
194 functions were introduced in
195 .St -p1003.1-2008 .
174 .SH ATTRIBUTES
175 .TS
176 box;
177 c | c
178 l | l .
179 ATTRIBUTE TYPE    ATTRIBUTE VALUE
180 -
181 Interface Stability    Standard
182 -
183 MT-Level            Safe
184 .TE

186 .SH SEE ALSO
187 .BR locale (1),
188 .BR setlocale (3C),
189 .BR uselocale (3C),
190 .BR environ (5),
191 .BR locale (5)

```

new/usr/src/man/man3c/opendir.3c

1

```
*****
5186 Sun Jul 27 18:01:34 2014
new/usr/src/man/man3c/opendir.3c
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wcscasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
opendir, dirfd are in XPG7
*****
1 .\" Copyright 2014 Garrett D'Amore <garrett@damore.org>
1 ' \" te
2 .\" Copyright (c) 2007, Sun Microsystems, Inc. All Rights Reserved.
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9 .\" You can obtain a copy of the license at usr/src/OPENSOLARIS.LICENSE or http:
10 .\" When distributing Covered Code, include this CDDL HEADER in each file and in
11 .Dd \"Jul 22, 2014\"
12 .Dt OPENDIR 3C
13 .Os
14 .Sh NAME
15 .Nm opendir ,
16 .Nm fdopendir
17 .Nd open directory
18 .Sh SYNOPSIS
19 .In dirent.h
20 .
21 .Ft \"DIR *\"
22 .Fn opendir \"const char *dirname\"
23 .
24 .Ft \"DIR *\"
25 .Fn fdopendir \"int fildes\"
26 .
27 .Sh DESCRIPTION
28 The
29 .Fn opendir
30 function opens a directory stream corresponding to the
31 directory named by the
32 .Fa dirname
33 argument.
34 .Lp
35 The
36 .Fn fdopendir
37 function opens a directory stream for the directory file
38 descriptor
39 .Fa fildes .
40 The directory file descriptor should not be used or
41 .TH OPENDIR 3C \"Jun 26, 2007\"
42 .SH NAME
43 opendir, fdopendir \- open directory
44 .SH SYNOPSIS
45 .LP
46 .nf
47 #include <sys/types.h>
48 #include <dirent.h>
49
50 \fBDIR * \fR\fBopendir\fR(\fBconst char * \fR\fBIdirname\fR);
51 .fi
52
53 .LP
54 .nf
55 \fBDIR * \fR\fBfdopendir\fR(\fBint \fR \fBfildes\fR);
56 .fi
```

new/usr/src/man/man3c/opendir.3c

2

```
28 .SH DESCRIPTION
29 .sp
30 .LP
31 The \fBopendir()\fR function opens a directory stream corresponding to the
32 directory named by the \fBIdirname\fR argument.
33 .sp
34 .LP
35 The \fBfdopendir()\fR function opens a directory stream for the directory file
36 descriptor \fBfildes\fR. The directory file descriptor should not be used or
41 closed following a successful function call, as this might cause undefined
42 results from future operations on the directory stream obtained from the call.
43 Use
44 .Xr closedir 3C
45 to close a directory stream.
46 .Lp
47 The directory stream is positioned at the first entry. If the type
48 .Ft DIR
49 is
50 Use \fBfclosedir\fR(3C) to close a directory stream.
51 .sp
52 .LP
53 The directory stream is positioned at the first entry. If the type \fBfBDir\fR is
50 implemented using a file descriptor, applications will only be able to open up
51 to a total of
52 .Bq OPEN_MAX
53 files and directories. A successful call to any
54 of the
55 .Xr exec 2
56 functions will close any directory streams that are open in
57 the calling process.
58 .Sh RETURN VALUES
59 Upon successful completion,
60 .Fn opendir
61 and
62 .Fn fdopendir
63 return a
64 pointer to an object of type
65 .Ft DIR .
66 Otherwise, a null pointer is returned
67 and
68 .Va errno
69 is set to indicate the error.
70 .Sh ERRORS
71 The
72 .Fn opendir
73 function will fail if:
74 .Bl -tag -width Er
75 .It Er EACCES
76 to a total of {\fBfBOPEN_MAX\fR} files and directories. A successful call to any
77 of the \fBfBexec\fR functions will close any directory streams that are open in
78 the calling process. See \fBfBexec\fR(2).
79 .SH RETURN VALUES
80 .sp
81 .LP
82 Upon successful completion, \fBfBopendir()\fR and \fBfBfdopendir()\fR return a
83 pointer to an object of type \fBfBDir\fR. Otherwise, a null pointer is returned
84 and \fBfBerrno\fR is set to indicate the error.
85 .SH ERRORS
86 .sp
87 .LP
88 The \fBfBopendir()\fR function will fail if:
89 .sp
90 .ne 2
91 .na
92 \fBfBfBEACCES\fR\fR
93 .ad
```

```

62 .RS 16n
63 Search permission is denied for the component of the path prefix of
64 .Fa dirname
65 or read permission is denied for
66 .Fa dirname .
67 .It Er ELOOP
68 Too many symbolic links were encountered in resolving
69 .Fa path .
70 .It Er ENAMETOOLONG
71 The length of the
72 .Fa dirname
73 argument exceeds
74 .Brq PATH_MAX ,
75 or a path name component is longer than
76 .Brq NAME_MAX
77 while
78 .Brq _POSIX_NO_TRUNC
79 is
80 \fIdirname\fR or read permission is denied for \fIdirname\fR.
81 .RE

82 .sp
83 .ne 2
84 .na
85 \fB\fBELOOP\fR\fR
86 .ad
87 .RS 16n
88 Too many symbolic links were encountered in resolving \fIpath\fR.
89 .RE

90 .sp
91 .ne 2
92 .na
93 \fB\fBENAMETOOLONG\fR\fR
94 .ad
95 .RS 16n
96 The length of the \fIdirname\fR argument exceeds {\fBPATH_MAX\fR}, or a path
97 name component is longer than {\fBNAME_MAX\fR} while {\fB_POSIX_NO_TRUNC\fR} is
98 in effect.
99 .It Er ENOENT
100 A component of
101 .Fa dirname
102 does not name an existing directory or
103 .Fa dirname
104 is an empty string.
105 .It Er ENOTDIR
106 A component of
107 .Fa dirname
108 is not a directory.
109 .El
110 .Lp
111 The
112 .Fn fdopendir
113 function will fail if:
114 .Bl -tag -width Er
115 .It Er ENOTDIR
116 The file descriptor
117 .Fa fildes
118 does not reference a directory.
119 .El
120 .Lp
121 The
122 .Fn opendir
123 function may fail if:
124 .Bl -tag -width Er
125 .It Er EMFILE

```

```

121 There are
122 .Brq OPEN_MAX
123 file descriptors currently open in the calling process.
124 .It Er ENAMETOOLONG
125 .RE

126 .sp
127 .ne 2
128 .na
129 \fB\fBENOENT\fR\fR
130 .ad
131 .RS 16n
132 A component of \fIdirname\fR does not name an existing directory or
133 \fIdirname\fR is an empty string.
134 .RE

135 .sp
136 .ne 2
137 .na
138 \fB\fBENOTDIR\fR\fR
139 .ad
140 .RS 16n
141 A component of \fIdirname\fR is not a directory.
142 .RE

143 .sp
144 .LP
145 The \fBfdopendir()\fR function will fail if:
146 .sp
147 .ne 2
148 .na
149 \fB\fBENOTDIR\fR\fR
150 .ad
151 .RS 11n
152 The file descriptor \fIfildes\fR does not reference a directory.
153 .RE

154 .sp
155 .LP
156 The \fBbopendir()\fR function may fail if:
157 .sp
158 .ne 2
159 .na
160 \fB\fBEMFILE\fR\fR
161 .ad
162 .RS 16n
163 There are {\fBOPEN_MAX\fR} file descriptors currently open in the calling
164 process.
165 .RE

166 .sp
167 .ne 2
168 .na
169 \fB\fBENAMETOOLONG\fR\fR
170 .ad
171 .RS 16n
172 Pathname resolution of a symbolic link produced an intermediate result whose
173 length exceeds
174 .Brq PATH_MAX .
175 .It Er ENFILE
176 length exceeds \fBPATH_MAX\fR.
177 .RE

178 .sp
179 .ne 2
180 .na

```

```

144 \fB\fBENFILE\fR\fR
145 .ad
146 .RS 16n
129 Too many files are currently open on the system.
130 .El
131 .Sh USAGE
132 The
133 .Fn opendir
134 and
135 .Fn fdopendir
136 functions should be used in conjunction with
137 .Xr readdir 3C ,
138 .Xr closedir 3C
139 and
140 .Xr rewinddir 3C
141 to examine the contents of the directory
142 .Po see the
143 .Sx EXAMPLES
144 section in
145 .Xr readdir 3C Pc .
146 This method is recommended for portability.
147 .Sh INTERFACE STABILITY
148 .Sy Standard .
149 .Sh MT-LEVEL
150 .Sy Safe .
151 .Sh SEE ALSO
152 .Xr exec 2 ,
153 .Xr lstat 2 ,
154 .Xr symlink 2 ,
155 .Xr closedir 3C ,
156 .Xr readdir 3C ,
157 .Xr rewinddir 3C ,
158 .Xr scandir 3C ,
159 .Xr standards 5
160 .Sh STANDARDS
161 The
162 .Fn opendir
163 function was introduced in
164 .Bx 4.2 .
165 and standardized in
166 .St -p1003.1 .
167 The
168 .Fn fdopendir
169 function was introduced in
170 .St -p1003.1-2008 .
148 .RE

150 .SH USAGE
151 .sp
152 .LP
153 The \fBopendir()\fR and \fBfdopendir()\fR functions should be used in
154 conjunction with \fBreaddir\fR(3C), \fBclosedir\fR(3C) and \fBrewinddir\fR(3C)
155 to examine the contents of the directory (see the \fBEXAMPLES\fR section in
156 \fBreaddir\fR(3C)). This method is recommended for portability.
157 .SH ATTRIBUTES
158 .sp
159 .LP
160 See \fBattributes\fR(5) for descriptions of the following attributes:
161 .sp

163 .sp
164 .TS
165 box;
166 c | c
167 l | l .
168 ATTRIBUTE TYPE    ATTRIBUTE VALUE

```

```

169 _
170 Interface Stability      T{
171 \fBopendir()\fR is Standard; \fBfdopendir()\fR is Evolving
172 T}
173 _
174 MT-Level                Safe
175 .TE

177 .SH SEE ALSO
178 .sp
179 .LP
180 \fBlstat\fR(2), \fBsymlink\fR(2), \fBclosedir\fR(3C), \fBreaddir\fR(3C),
181 \fBrewinddir\fR(3C), \fBscandir\fR(3C), \fBattributes\fR(5)

```



```

87 discouraged.  Instead, the
88 .Xr pthread_attr_setstack 3C
89 and
90 .Xr pthread_attr_getstack 3C
91 functions, which were introduced in
92 .St -p1003.1-2001 ,
93 should be used instead.
94 .Sh INTERFACE STABILITY
95 .Sy Obsolete Standard .
96 .Sh MT-LEVEL
97 .Sy MT-Safe .
98 .Sh SEE ALSO
99 .Xr pthread_attr_getstack 3C ,
100 .Xr pthread_attr_init 3C ,
101 .Xr pthread_attr_setdetachstate 3C ,
102 .Xr pthread_attr_setstack 3C ,
103 .Xr pthread_attr_setstacksize 3C ,
104 .Xr pthread_create 3C ,
105 .Xr standards 5
106 .Sh STANDARDS
107 The
108 .Fn pthread_attr_setstackaddr
109 and
110 .Fn pthread_attr_getstackaddr
111 functions were introduced in
112 .St -p1003.1c-95 .
113 They were obsoleted in
114 .St -p1003.1-2001
115 and removed from
116 .St -p1003.1-2008 .
49 .sp
50 .LP
51 If successful, the \fBpthread_attr_getstackaddr()\fR function stores the
52 \fIstackaddr\fR attribute value in \fIstackaddr\fR.
53 .SH ERRORS
54 .sp
55 .LP
56 The \fBpthread_attr_setstackaddr()\fR function may fail if:
57 .sp
58 .ne 2
59 .na
60 \fB\{fBEBINVAL\}\fR\fR
61 .ad
62 .RS 10n
63 \fIattr\fR is invalid.
64 .RE

66 .sp
67 .LP
68 The \fBpthread_attr_getstackaddr()\fR function may fail if:
69 .sp
70 .ne 2
71 .na
72 \fB\{fBEBINVAL\}\fR\fR
73 .ad
74 .RS 10n
75 \fIattr\fR or \fIstackaddr\fR is invalid.
76 .RE

78 .SH ATTRIBUTES
79 .sp
80 .LP
81 See \fBattributes\fR(5) for descriptions of the following attributes:
82 .sp

84 .sp

```

```

85 .TS
86 box;
87 c | c
88 l | l .
89 ATTRIBUTE TYPE  ATTRIBUTE VALUE
90 _
91 Interface Stability      Standard
92 _
93 MT-Level                MT-Safe
94 .TE

96 .SH SEE ALSO
97 .sp
98 .LP
99 \fBpthread_attr_init\fR(3C), \fBpthread_attr_setdetachstate\fR(3C),
100 \fBpthread_attr_setstacksize\fR(3C), \fBpthread_create\fR(3C),
101 \fBattributes\fR(5), \fBstandards\fR(5)

```


new/usr/src/man/man3c/scandir.3c

1

3450 Sun Jul 27 18:01:34 2014
new/usr/src/man/man3c/scandir.3c
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wcsasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
Various tweaks -- add our sections, etc.
More markup tweaks.

alphasort and scandir are new in XPG7

```
1 1.\" Copyright 2014 Garrett D'Amore <garrett@damore.org>
1 1.\" te
2 1.\" Copyright (c) 2004, Sun Microsystems, Inc. All Rights Reserved.
3 1.\" The contents of this file are subject to the terms of the Common Development
4 1.\" You can obtain a copy of the license at usr/src/OPENSOLARIS.LICENSE or http:
5 1.\" When distributing Covered Code, include this CDDL HEADER in each file and in
6 .Dd \"Jul 22, 2014\"
7 .Dt SCANDIR 3C
8 .Os
9 .Sh NAME
10 .Nm scandir ,
11 .Nm alphasort
12 .Nd scan a directory
13 .Sh SYNOPSIS
14 .In dirent.h
15 .
16 .Ft int
17 .Fo scandir
18 .Fa \"const char *dirname\"
19 .Fa \"struct dirent ***namelist\"
20 .Fa \"int *(lp*select*(rp)*(lpconst struct dirent ***(rp)\"
21 .Fa \"int *(lp*dcomp*(rp)*(lpconst struct dirent **, const struct dirent ***(\"
22 .Fc
23 .
24 .Ft int
25 .Fn alphasort \"const struct dirent **d1\" \"const struct dirent **d2\"
26 .
27 .Sh DESCRIPTION
28 The
29 .Fn scandir
30 function reads the directory
31 .Fa dirname
32 using
33 .Xr readdir 3C
34 and builds an array of pointers to directory entries using
35 .Xr malloc 3C .
36 The
37 .Fa namelist
38 argument is a pointer to an array of
39 structure pointers. The
40 .Fa select
41 argument is a pointer to a routine that is
42 .TH SCANDIR 3C \"May 4, 2004\"
43 .SH NAME
44 scandir, alphasort \- scan a directory
45 .SH SYNOPSIS
46 .LP
47 .nf
48 #include <sys/types.h>
49 #include <dirent.h>
50
51 \fBint\fR \fBscandir\fR(\fBconst char *\fR\fBfIdirname\fR, \fBstruct dirent *\fR(\fB
52 \fBint\fR (*\fBfIselect\fR)(\fBconst struct dirent *),
53 \fBint\fR (*\fBfIdcomp\fR)(\fBconst struct dirent **\fR,
54 \fBconst struct dirent **\fR));
55 .fi
```

new/usr/src/man/man3c/scandir.3c

2

```
21 .LP
22 .nf
23 \fBint\fR \fBalphasort\fR(\fBconst struct dirent **\fR\fBfId1\fR,
24 \fBconst struct dirent **\fR\fBfId2\fR);
25 .fi
26
27 .SH DESCRIPTION
28 .sp
29 .LP
30 The \fBscandir\fR function reads the directory \fBfIdirname\fR using
31 \fBfBreaddir\fR(3C) and builds an array of pointers to directory entries using
32 \fBfBmalloc\fR(3C). The \fBfInamelist\fR argument is a pointer to an array of
33 structure pointers. The \fBfIselect\fR argument is a pointer to a routine that is
34 called with a pointer to a directory entry and returns a non-zero value if the
35 directory entry is included in the array. If this pointer is
36 .Dv NULL ,
37 then
38 all the directory entries are included. The
39 .Fa dcomp
40 argument is a pointer
41 to a routine that is passed to
42 .Xr qsort 3C ,
43 which sorts the completed array. If this pointer is
44 .Dv NULL ,
45 the array is not sorted.
46 .LP
47 The
48 .Fn alphasort
49 function can be used as the
50 .Fn dcomp
51 function parameter for the
52 .Fn scandir
53 function to sort the directory entries into
54 alphabetical order, as if by the
55 .Xr strcoll 3C
56 function. Its arguments are
57 directory entry is included in the array. If this pointer is \fBfINULL\fR, then
58 all the directory entries are included. The \fBfIdcomp\fR argument is a pointer
59 to a routine that is passed to \fBfBqsort\fR(3C), which sorts the completed
60 array. If this pointer is \fBfINULL\fR, the array is not sorted.
61 .sp
62 .LP
63 The \fBalphasort\fR function can be used as the \fBfIdcomp\fR function
64 parameter for the \fBscandir\fR function to sort the directory entries into
65 alphabetical order, as if by the \fBfBstrcoll\fR(3C) function. Its arguments are
66 the two directory entries to compare.
67 .SH RETURN VALUES
68 The
69 .Fn scandir
70 function returns the number of entries in the array and a
71 pointer to the array through the
72 .Fa namelist
73 argument. When an error is
74 encountered,
75 .Fn scandir
76 returns -1 and
77 .Va errno
78 is set to indicate the error.
79 .LP
80 The
81 .Fn alphasort
82 function returns an integer greater than, equal to, or
83 less than 0 if the directory entry name pointed to by
84 .Fa d1
85 is greater than, equal to, or less than the directory entry name pointed to by
```

```

85 .Fa d2
86 when
45 .SH RETURN VALUES
46 .sp
47 .LP
48 The \fBscandir()\fR function returns the number of entries in the array and a
49 pointer to the array through the \fInamelist\fR argument. When an error is
50 encountered, \fBscandir()\fR returns -1 and \fBerrno\fR is set to indicate the
51 error.
52 .sp
53 .LP
54 The \fBalphasort()\fR function returns an integer greater than, equal to, or
55 less than 0 if the directory entry name pointed to by \fId1\fR is greater than,
56 equal to, or less than the directory entry name pointed to by \fId2\fR when
57 both are interpreted as appropriate to the current locale. There is no return
58 value reserved to indicate an error.
89 .Sh ERRORS
90 The
91 .Fn scandir
92 function will fail if:
93 .Bl -tag -width Er
94 .It Er EOVERFLOW
59 .SH ERRORS
60 .sp
61 .LP
62 The \fBscandir()\fR function will fail if:
63 .sp
64 .ne 2
65 .na
66 \fB\fBEVERFLOW\fR\fR
67 .ad
68 .RS 13n
95 The number of directory entries exceeds the number that can be represented by
96 an
97 .Vt int .
98 .El
99 .Sh USAGE
100 The
101 .Fn scandir
102 and
103 .Fn alphasort
104 functions have transitional interfaces for 64-bit file offsets. See
105 .Xr lf64 5 .
106 .Sh INTERFACE STABILITY
107 .Sy Standard .
108 .Sh MT-LEVEL
109 The
110 .Fn scandir
111 function is
112 .Sy Unsafe .
113 The
114 .Fn alphasort
115 function is
116 .Sy Safe .
117 .Sh SEE ALSO
118 .Xr malloc 3C ,
119 .Xr qsort 3C ,
120 .Xr readdir 3C ,
121 .Xr strcoll 3C ,
122 .Xr lf64 5 ,
123 .Xr standards 5
124 .Sh STANDARDS
125 The
126 .Fn alphasort
127 and
128 .Fn scandir

```

```

129 functions were introduced in
130 .St -p1003.1-2008 .
70 an \fBint\fR.
71 .RE

73 .SH USAGE
74 .sp
75 .LP
76 The \fBscandir()\fR and \fBalphasort()\fR functions have transitional
77 interfaces for 64-bit file offsets. See \fBlf64\fR(5).
78 .SH ATTRIBUTES
79 .sp
80 .LP
81 See \fBattributes\fR(5) for descriptions of the following attributes:
82 .sp

84 .sp
85 .TS
86 box;
87 c | c
88 l | l .
89 ATTRIBUTE TYPE    ATTRIBUTE VALUE
90 -
91 Interface Stability    Stable
92 -
93 MT-Level            See below.
94 .TE

96 .sp
97 .LP
98 The \fBscandir()\fR function is Unsafe. The \fBalphasort()\fR function is Safe.
99 .SH SEE ALSO
100 .sp
101 .LP
102 \fBmalloc\fR(3C), \fBqsort\fR(3C), \fBreaddir\fR(3C), \fBstrcoll\fR(3C),
103 \fBattributes\fR(5), \fBlf64\fR(5)

```

new/usr/src/man/man3c/ualarm.3c

1

3265 Sun Jul 27 18:01:34 2014

new/usr/src/man/man3c/ualarm.3c

Document obsolescence of ualarm.

```
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7  .Dd \"Jul 22, 2014\"
8  .Dt UALARM 3C
9  .Os
10 .Sh NAME
11 .Nm ualarm
12 .Nd schedule signal after interval in microseconds
13 .Sh SYNOPSIS
14 .In unistd.h
15 .Ft useconds_t
16 .Fn ualarm \"Buseconds_t useconds\" \"useconds_t interval\"
17 .Sh DESCRIPTION
18 The
19 .Fn ualarm
20 function causes the
21 .Dv SIGALRM
22 signal to be generated for
23 8 .TH UALARM 3C \"Aug 14, 2002\"
24 9 .SH NAME
25 10 ualarm \|- schedule signal after interval in microseconds
26 11 .SH SYNOPSIS
27 12 .LP
28 13 .nf
29 14 #include <unistd.h>
30
31 16 \fBuseconds_t\fR \fBualarm\fR(\fBuseconds_t\fR \fBiuseconds\fR, \fBuseconds_t\fR
32 17 \fBi
33
34 19 .SH DESCRIPTION
35 20 .sp
36 21 .LP
37 22 The \fBualarm()\fR function causes the \fBSIGALRM\fR signal to be generated for
38 23 the calling process after the number of real-time microseconds specified by the
39 24 .Fa useconds argument has elapsed. When the
40 25 .Fa interval
41 26 argument is
42 24 \fBiuseconds\fR argument has elapsed. When the \fBiinterval\fR argument is
43 27 non-zero, repeated timeout notification occurs with a period in microseconds
44 28 specified by the \fBiinterval\fR argument. If the notification signal,
45 29 .Dv SIGALRM ,
46 30 is not caught or ignored, the calling process is terminated.
47 31 .Lp
48 27 \fBSIGALRM\fR, is not caught or ignored, the calling process is terminated.
49 28 .sp
50 29 .LP
51 32 Because of scheduling delays, resumption of execution when the signal is caught
52 33 may be delayed an arbitrary amount of time.
53 34 .Lp
54 35 Interactions between
55 36 .Fn ualarm
56 37 and either
57 38 .Xr alarm 2
58 39 or
59 40 .Xr sleep 3C
60 41 are unspecified.
```

new/usr/src/man/man3c/ualarm.3c

2

```
42 .Sh RETURN VALUES
43 The
44 .Fn ualarm
45 function returns the number of microseconds remaining from
46 the previous
47 .Fn ualarm
48 call. If no timeouts are pending or if
49 .Fn ualarm
50 has not previously been called,
51 .Fn ualarm
52 returns 0.
53 .Sh ERRORS
54 32 .sp
55 33 .LP
56 34 Interactions between \fBualarm()\fR and either \fBalarm\fR(2) or
57 35 \fBsleept\fR(3C) are unspecified.
58 36 .SH RETURN VALUES
59 37 .sp
60 38 .LP
61 39 The \fBualarm()\fR function returns the number of microseconds remaining from
62 40 the previous \fBualarm()\fR call. If no timeouts are pending or if
63 41 \fBualarm()\fR has not previously been called, \fBualarm()\fR returns \fB0\fR.
64 42 .SH ERRORS
65 43 .sp
66 44 .LP
67 54 No errors are defined.
68 55 .Sh USAGE
69 56 The
70 57 .Fn ualarm
71 58 function is a simplified interface to
72 59 .Xr settimer 2 ,
73 60 and uses the
74 61 .Dv ITIMER_REAL
75 62 interval timer. It's use has been deprecated in favor of the
76 63 .Xr timer_create 3C
77 64 family of functions.
78 65 .Sh INTERFACE STABILITY
79 66 .Sy Obsolete Standard .
80 67 .Sh SEE ALSO
81 68 .Xr alarm 2 ,
82 69 .Xr settimer(2),
83 70 .Xr sighold 3C ,
84 71 .Xr signal 3C ,
85 72 .Xr sleep 3C ,
86 73 .Xr timer_create 3C ,
87 74 .Xr usleep 3C ,
88 75 .Xr standards 5
89 76 .Sh STANDARDS
90 77 The
91 78 .Fn ualarm
92 79 function was introduced in
93 80 .Bx 4.3
94 81 and standardized in
95 82 .St -xpg4.2 .
96 83 It was subsequently obsoleted in
97 84 .St -p1003.1-2001
98 85 and removed from
99 86 .St -p1003.1-2008 .
100 46 .SH USAGE
101 47 .sp
102 48 .LP
103 49 The \fBualarm()\fR function is a simplified interface to \fBsettimer\fR(2),
104 50 and uses the \fBITIMER_REAL\fR interval timer.
105 51 .SH ATTRIBUTES
106 52 .sp
107 53 .LP
```

```
54 See \fBattributes\fR(5) for descriptions of the following attributes:
55 .sp
57 .sp
58 .TS
59 box;
60 c | c
61 l | l .
62 ATTRIBUTE TYPE    ATTRIBUTE VALUE
63 -
64 Interface Stability    Standard
65 .TE
67 .SH SEE ALSO
68 .sp
69 .LP
70 \fBalarm\fR(2), \fBsetitimer\fR(2), \fBsigset\fR(3C), \fBsignal\fR(3C),
71 \fBsleep\fR(3C), \fBusleep\fR(3C), \fBattributes\fR(5), \fBstandards\fR(5)
```

new/usr/src/man/man3c/usleep.3c

1

2989 Sun Jul 27 18:01:34 2014

new/usr/src/man/man3c/usleep.3c

oops, dropped leading 'f'

Minor markup tweaks (Sy instead of Nm).

fix incorrect standard citations

first round of POSIX 2008 stuff

```
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9 .Dd \"Jul 20, 2014\"
10 .Dt USLEEP 3C
11 .Os
12 .Sh NAME
13 .Nm usleep
14 .Nd suspend execution for interval in microseconds
15 .Sh SYNOPSIS
16 .In unistd.h
17 .Fn usleep \"useconds_t useconds\"
18 .Sh DESCRIPTION
19 The
20 .Fn usleep
21 function suspends the caller from execution for the number
22 of microseconds specified by the
23 .Fa useconds
24 argument. The actual suspension
25 9 .TH USLEEP 3C \"Feb 5, 2008\"
26 .SH NAME
27 usleep \- suspend execution for interval in microseconds
28 .SH SYNOPSIS
29 .LP
30 .nf
31 #include <unistd.h>
32
33 \fBint\fR \fBusleep\fR(\fBuseconds_t\fR \fBiuseconds\fR);
34 .fi
35
36 .SH DESCRIPTION
37 .sp
38 .LP
39 The \fBusleep()\fR function suspends the caller from execution for the number
40 of microseconds specified by the \fBiuseconds\fR argument. The actual suspension
41 time might be less than requested because any caught signal will terminate
42 the
43 .Fn usleep
44 following execution of that signal's catching routine. The
45 \fBusleep()\fR following execution of that signal's catching routine. The
46 suspension time might be longer than requested by an arbitrary amount because
47 of the scheduling of other activity in the system.
48 .LP
49 If the value of
50 .Fa useconds
51 is 0, then the call has no effect.
52 .LP
53 The use of the
54 .Fn usleep
55 function has no effect on the action or blockage
56 .sp
57 .LP
58 If the value of \fBiuseconds\fR is 0, then the call has no effect.
```

new/usr/src/man/man3c/usleep.3c

2

```
32 .sp
33 .LP
34 The use of the \fBusleep()\fR function has no effect on the action or blockage
35 of any signal. In a multithreaded process, only the invoking thread is
36 suspended from execution.
37 .Sh RETURN VALUES
38 On completion,
39 .Fn usleep
40 returns 0. There are no error returns.
41 .Sh ERRORS
42 .SH RETURN VALUES
43 .sp
44 .LP
45 On completion, \fBusleep()\fR returns \fB0\fR. There are no error returns.
46 .SH ERRORS
47 .sp
48 .LP
49 No errors are returned.
50 .Sh USAGE
51 The
52 .Fn usleep
53 function is included for its historical usage and is Obsolete. The
54 .Xr nanosleep 3C
55 function is preferred over this function.
56 .Sh INTERFACE STABILITY
57 .Sy Obsolete Standard .
58 .Sh MT-LEVEL
59 .Sy Safe .
60 .Sh SEE ALSO
61 .Xr nanosleep 3C ,
62 .Xr sleep 3C ,
63 .Xr standards 5
64 .Sh STANDARDS
65 The
66 .Fn usleep
67 function was introduced in
68 .Bx 4.3 ,
69 and then standardized in
70 .St -xpg4.2 .
71 It was subsequently obsoleted in
72 .St -p1003.1-2001 ,
73 and removed from
74 .St -p1003.1-2008 .
75 .SH USAGE
76 .sp
77 .LP
78 The \fBusleep()\fR function is included for its historical usage. The
79 \fBnanosleep\fR(3C) function is preferred over this function.
80 .SH ATTRIBUTES
81 .sp
82 .LP
83 See \fBattributes\fR(5) for descriptions of the following attributes:
84 .sp
85 .sp
86 .TS
87 box;
88 c | c
89 l | l .
90 ATTRIBUTE TYPE ATTRIBUTE VALUE
91 -
92 Interface Stability Committed
93 -
94 MT-Level Safe
95 -
96 Standard See \fBstandards\fR(5).
```

```
68 .TE
70 .SH SEE ALSO
71 .sp
72 .LP
73 \fBnanosleep\fR(3C), \fBsleep\fR(3C), \fBattributes\fR(5), \fBstandards\fR(5)
```

new/usr/src/man/man3c/wcscasecmp.3c

1

```
*****
3100 Sun Jul 27 18:01:35 2014
new/usr/src/man/man3c/wcscasecmp.3c
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wcscasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
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11 .\"
12 .\" Copyright 2014 Garrett D'Amore <garrett@damore.org>
13 .\"
14 .Dd \"Jul 27, 2014\"
15 .Dt WCSCASECMP 3C
16 .Os
17 .Sh NAME
18 .Nm wcscasecmp ,
19 .Nm wcscasecmp_l ,
20 .Nm wcsncasecmp ,
21 .Nm wcsncasecmp_l
22 .Nd case-insensitive wide-character string comparison
23 .Sh SYNOPSIS
24 .In wchar.h
25 .
26 .Ft int
27 .Fo wcscasecmp
28 .Fa \"const wchar_t *ws1\"
29 .Fa \"const wchar_t *ws2\"
30 .Fc
31 .
32 .Ft int
33 .Fo wcscasecmp_l
34 .Fa \"const wchar_t *ws1\"
35 .Fa \"const wchar_t *ws2\"
36 .Fa \"locale_t loc\"
37 .Fc
38 .
39 .Ft int
40 .Fo wcsncasecmp
41 .Fa \"const wchar_t *ws1\"
42 .Fa \"const wchar_t *ws2\"
43 .Fa \"size_t n\"
44 .Fc
45 .
46 .Ft int
47 .Fo wcsncasecmp_l
48 .Fa \"const wchar_t *ws1\"
49 .Fa \"const wchar_t *ws2\"
50 .Fa \"size_t n\"
51 .Fa \"locale_t loc\"
52 .Fc
53 .Sh DESCRIPTION
54 These functions perform case-insensitive comparison of wide-character
55 strings
56 .Fa ws1
57 and
58 .Fa ws2 .
59 Pairs of wide-characters from each of
```

new/usr/src/man/man3c/wcscasecmp.3c

2

```
60 .Fa ws1
61 and
62 .Fa ws2
63 are compared consecutively, ignoring differences in case (in the
64 .\"POSIX\" upper case characters are treated as lower case). If
65 the two values are different, the comparison stops and either
66 a negative value is returned if the character from
67 .Fa ws1
68 is less than that from
69 .Fa ws2 ,
70 or a positive is returned if the character from
71 .Fa ws1
72 is greater than that from
73 .Fa ws2 .
74 The comparison also stops if both characters are null wide-characters,
75 or, in the case of
76 .Fn wcsncasecmp
77 and
78 .Fn wcsncasecmp_l ,
79 after
80 .Fa n
81 comparisons have been made without finding a difference. In either of
82 these two cases, 0 is returned.
83 .Lp
84 The
85 .Fn wcscasecmp
86 and
87 .Fn wcsncasecmp
88 functions use the
89 .Dv LC_CTYPE
90 category of the current locale to determine case. The
91 .Fn wcscasecmp_l
92 and
93 .Fn wcsncasecmp_l
94 functions use the
95 .Dv LC_CTYPE
96 category of the locale pointed to by
97 .Fa loc
98 to determine case.
99 .Lp
100 Passing
101 .Dv LC_GLOBAL_LOCALE
102 for
103 .Fa loc
104 results in undefined behavior.
105 .Lp
106 The
107 .Fn wcscasecmp ,
108 .Fn wcsncasecmp ,
109 .Fn wcscasecmp_l ,
110 and
111 .Fn wcsncasecmp_l
112 functions are the wide-character equivalents of the
113 .Fn strcasecmp ,
114 .Fn strncasecmp ,
115 .Fn strcasemp_l ,
116 and
117 .Fn strncasecmp_l
118 functions, respectively.
119 .Sh RETURN VALUES
120 These functions return a negative value if, ignoring case,
121 .Fa ws1
122 is less than
123 .Fa ws1 ,
124 or a positive value if
125 .Fa ws1
```

```
126 is greater than
127 .Fa ws2 ,
128 or 0 if the both
129 .Fa ws1
130 and
131 .Fa ws2
132 are the same.
133 .Sh ERRORS
134 None.
135 .Sh INTERFACE STABILITY
136 .Sy Standard .
137 .Sh MT-LEVEL
138 .Sy MT-Safe .
139 .Sh SEE ALSO
140 .Xr newlocale 3C ,
141 .Xr setlocale 3C ,
142 .Xr strcasecmp 3C ,
143 .Xr strcasecmp_l 3C ,
144 .Xr strncasecmp 3C ,
145 .Xr strncasecmp_l 3C ,
146 .Xr uselocale 3C ,
147 .Xr wchar.h 3HEAD ,
148 .Xr locale 5 ,
149 .Xr standards 5
150 .Sh STANDARDS
151 The
152 .Fn wscasecmp ,
153 .Fn wcsncasecmp ,
154 .Fn wscasecmp_l ,
155 and
156 .Fn wcsncasecmp_l
157 functions were introduced in
158 .St -p1003.1-2008 .
```


new/usr/src/man/man3c/wcsdup.3c

1

```
*****
1543 Sun Jul 27 18:01:35 2014
new/usr/src/man/man3c/wcsdup.3c
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wcscasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
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13 .\"
14 .Dd "Jul 27, 2014"
15 .Dt WCDUP 3C
16 .Os
17 .Sh NAME
18 .Nm wcsdup
19 .Nd duplicate wide character string
20 .Sh SYNOPSIS
21 .In wchar.h
22 .
23 .Ft wchar_t
24 .Fo wcsdup
25 .Fa "const wchar_t *string"
26 .Fc
27 .
28 .Sh DESCRIPTION
29 The
30 .Fn wcsdup
31 function duplicates a wide-character
32 .Fa string ,
33 allocating sufficient memory to store the copy, and then
34 copying from
35 .Fa string .
36 The resulting copy is returned. It may be deallocated with
37 .Xr free 3C
38 when it is no longer needed. The
39 .Fn wcsdup
40 is the wide-character equivalent of
41 .Xr strdup 3C .
42 .Sh RETURN VALUES
43 On success, the functions
44 .Fn wcsdup
45 returns the newly allocated copy of the string; on failure it
46 returns
47 .Dv NULL
48 and sets
49 .Va errno .
50 .Sh ERRORS
51 The
52 .Fn wcsdup
53 function will fail if:
54 .Bl -tag -width Er
55 .It Er ENOMEM
56 Insufficient memory was available to create the copy.
57 .El
58 .Sh INTERFACE STABILITY
59 .Sy Standard .
```

new/usr/src/man/man3c/wcsdup.3c

2

```
60 .Sh MT-LEVEL
61 .Sy MT-Safe .
62 .Sh SEE ALSO
63 .Xr free 3C ,
64 .Xr strdup 3C ,
65 .Xr wcslen 3C ,
66 .Xr wchar.h 3HEAD ,
67 .Xr locale 5 ,
68 .Xr standards 5
69 .Sh STANDARDS
70 The
71 .Fn wcsdup
72 function was introduced in
73 .St -p1003.1-2008 .
```

new/usr/src/man/man3c/wcslen.3c

1

```
*****
1760 Sun Jul 27 18:01:35 2014
new/usr/src/man/man3c/wcslen.3c
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wcscasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
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13 .\"
14 .Dd \"Jul 27, 2014\"
15 .Dt WCSLEN 3C
16 .Os
17 .Sh NAME
18 .Nm wcslen ,
19 .Nm wcsnlen
20 .Nd get length of wide-character string
21 .Sh SYNOPSIS
22 .In wchar.h
23 .
24 .Ft wchar_t
25 .Fo wcslen
26 .Fa \"const wchar_t *string\"
27 .Fc
28 .
29 .Ft wchar_t
30 .Fo wcsnlen
31 .Fa \"const wchar_t *string\"
32 .Fa \"size_t maxlen\"
33 .Fc
34 .
35 .Sh DESCRIPTION
36 The
37 .Fn wcslen
38 and
39 .Fn wcsnlen
40 functions count the number of wide-characters that are present
41 .Fa string .
42 They stop counting when they encounter a null wide-character.
43 The terminating null wide-character is not included in the NULL.
44 .Lp
45 Additionally,
46 .Fn wcsnlen
47 stops counting after it has counted
48 .Fa maxlen
49 wide-characters.
50 .Lp
51 The
52 .Fn wcslen
53 and
54 .Fn wcsnlen
55 functions are the wide-character equivalents of
56 .Xr strlen 3C
57 and
58 .Xr strnlen 3C ,
59 respectively.
```

new/usr/src/man/man3c/wcslen.3c

2

```
60 .Sh RETURN VALUES
61 The
62 .Fn wcslen
63 function returns the length of
64 .Fa string .
65 The
66 .Fn wcsnlen
67 function returns the smaller of the length of
68 .Fa string
69 and
70 .Fa maxlen .
71 .Sh ERRORS
72 None.
73 .Sh INTERFACE STABILITY
74 .Sy Standard .
75 .Sh MT-LEVEL
76 .Sy MT-Safe .
77 .Sh SEE ALSO
78 .Xr free 3C ,
79 .Xr strlen 3C ,
80 .Xr strnlen 3C ,
81 .Xr wchar.h 3HEAD ,
82 .Xr locale 5 ,
83 .Xr standards 5
84 .Sh STANDARDS
85 The
86 .Fn wcslen
87 function was introduced in
88 .St -xpg4
89 and standardized in
90 .St -isoC-99 .
91 The
92 .Fn wcsnlen
93 function was introduced in
94 .St -p1003.1-2008 .
```

```

*****
15293 Sun Jul 27 18:01:35 2014
new/usr/src/man/man3c/wcstring.3c
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wcscasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
Various tweaks -- add our sections, etc.
Fixes for wcstok.
Finished obsoleting interfaces for XPG7.
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11 .Dd "Jul 22, 2014"
12 .Dt WCSTRING 3C
13 .Os
14 .Sh NAME
15 .Nm wcstring ,
16 .Nm wcscat ,
17 .Nm wcsncat ,
18 .Nm wscat ,
19 .Nm wcsncmp ,
20 .Nm wscmp ,
21 .Nm wcsncmp ,
22 .Nm wsncmp ,
23 .Nm wcscpy ,
24 .Nm wscpy ,
25 .Nm wcsncpy ,
26 .Nm wsncpy ,
27 .Nm wcschr ,
28 .Nm wschr ,
29 .Nm wcsrchr ,
30 .Nm wsrchr ,
31 .Nm windex ,
32 .Nm wrindex ,
33 .Nm wcpbrk ,
34 .Nm wcpbrk ,
35 .Nm wscwcs ,
36 .Nm wcssp ,
37 .Nm wssp ,
38 .Nm wscspn ,
39 .Nm wscspn ,
40 .Nm wcstok ,
41 .Nm wstok
42 .Nd wide-character string operations
43 .
44 .Sh SYNOPSIS
45 .In wchar.h
46 .
47 .Ft "wchar_t *"
48 .Fn wcscat "wchar_t *ws1" "const wchar_t *ws2"
49 .
50 .Ft "wchar_t *"
51 .Fn wcsncat "wchar_t *restrict ws1" "const wchar_t *restrict ws2" "size_t n"
52 .
53 .Ft int
54 .Fn wscmp "const wchar_t *ws1" "const wchar_t *ws2"
55 .

```

```

56 .Ft int
57 .Fn wcsncmp "const wchar_t *ws1" "const wchar_t *ws2" "size_t n"
58 .
59 .Ft "wchar_t *"
60 .Fn wcscpy "wchar_t *ws1" "const wchar_t *ws2"
61 .
62 .Ft "wchar_t *"
63 .Fn wcsncpy "wchar_t *restrict ws1" "const wchar_t *restrict ws2" "size_t n"
64 .
65 .Ft "wchar_t *"
66 .Fn wcschr "const wchar_t *ws" "wchar_t wc"
67 .
68 .Ft "wchar_t *"
69 .Fn wcsrchr "const wchar_t *ws" "wchar_t wc"
70 .
71 .Ft "wchar_t *"
72 .Fn wcpbrk "const wchar_t *ws1" "const wchar_t *ws2"
73 .
74 .Ft "wchar_t *"
75 .Fn wscwcs "const wchar_t *ws1" "const wchar_t *ws2"
76 .
77 .Ft size_t
78 .Fn wcssp "const wchar_t *ws1" "const wchar_t *ws2"
79 .
80 .Ft size_t
81 .Fn wscspn "const wchar_t *ws1" "const wchar_t *ws2"
82 .
83 .Ss "XPG4 and SUS"
84 .
85 .Ft "wchar_t *"
86 .Fn wcstok "wchar_t *restrict ws1" "const wchar_t *restrict ws2"
87 .
88 .Ss "Default and other standards"
89 .
90 .Ft "wchar_t *"
91 .Fo wcstok
92 .Fa "wchar_t *restrict ws1"
93 .Fa "const wchar_t *restrict ws2"
94 .Fa "wchar_t **restrict ptr"
95 .Fc
96 .
97 .In wchar.h
98 .
99 .Ft wchar_t *
100 .Fn wscat "wchar_t *ws1" "const wchar_t *ws2"
101 .
102 .Ft "wchar_t *"
103 .Fn wsncat "wchar_t *ws1" "const wchar_t *ws2" "size_t n"
104 .
105 .Ft int
106 .Fn wscmp "const wchar_t *ws1" "const wchar_t *ws2"
107 .
108 .Ft int
109 .Fn wcsncmp "const wchar_t *ws1" "const wchar_t *ws2" "size_t n"
110 .
111 .Ft "wchar_t *"
112 .Fn wscpy "wchar_t *ws1" "const wchar_t *ws2"
113 .
114 .Ft "wchar_t *"
115 .Fn wsncpy "wchar_t *ws1" "const wchar_t *ws2" "size_t n"
116 .
117 .Ft "wchar_t *"
118 .Fn wschr "const wchar_t *ws" "wchar_t wc"
119 .
120 .Ft "wchar_t *"
121 .Fn wsrchr "const wchar_t *ws" "wchar_t wc"

```

```
new/usr/src/man/man3c/wcstring.3c
```

```

188 .Fa ws2
189 (including the terminating null
190 .TH WCSTRING 3C "Aug 14, 2002"
191 .SH NAME
192 wcstring, wcscat, wscat, wcsncat, wsncat, wcscmp, wscmp, wcsncmp, wsncmp,
193 wcsncpy, wscopy, wcsncpy, wsncpy, wcslen, wslen, wcschr, wschr, wcsrchr, wsrchr,
194 windex, wrindex, wcpbrk, wspbrk, wcsvcs, wcssp, wcssp, wcsspn, wscspn,
195 wcstok, wstok \- wide-character string operations
196 .SH SYNOPSIS
197 .LP
198 .nf
199 #include <wchar.h>
200
201 \fBwchar_t * \fR \fBwcscat \fR ( \fBwchar_t * \fR \fIws1 \fR, \fBconst wchar_t * \fR \fIws
202 .fi
203
204 .LP
205 .nf
206 \fBwchar_t * \fR \fBwcsncat \fR ( \fBwchar_t * \fR \fIws1 \fR, \fBconst wchar_t
207 \fBsize_t \fR \fIn \fR );
208 .fi
209
210 .LP
211 .nf
212 \fBint \fR \fBwcscmp \fR ( \fBconst wchar_t * \fR \fIws1 \fR, \fBconst wchar_t * \fR \fIw
213 .fi
214
215 .LP
216 .nf
217 \fBint \fR \fBwcsncmp \fR ( \fBconst wchar_t * \fR \fIws1 \fR, \fBconst wchar_t * \fR \fI
218 .fi
219
220 .LP
221 .nf
222 \fBwchar_t * \fR \fBwcsncpy \fR ( \fBwchar_t * \fR \fIws1 \fR, \fBconst wchar_t * \fR \fIws
223 .fi
224
225 .LP
226 .nf
227 \fBwchar_t * \fR \fBwcsncpy \fR ( \fBwchar_t * \fR \fIws1 \fR, \fBconst wchar_t
228 \fBsize_t \fR \fIn \fR );
229 .fi
230
231 .LP
232 .nf
233 \fBsize_t \fR \fBwcslen \fR ( \fBconst wchar_t * \fR \fIws \fR );
234 .fi
235
236 .LP
237 .nf
238 \fBwchar_t * \fR \fBwcschr \fR ( \fBconst wchar_t * \fR \fIws \fR, \fBwchar_t \fR \fIwc \fR
239 .fi
240
241 .LP
242 .nf
243 \fBwchar_t * \fR \fBwcsrchr \fR ( \fBconst wchar_t * \fR \fIws \fR, \fBwchar_t \fR \fIwc \fR
244 .fi
245
246 .LP
247 .nf
248 \fBwchar_t * \fR \fBwcpbrk \fR ( \fBconst wchar_t * \fR \fIws1 \fR, \fBconst wchar_t * \fR
249 .fi
250
251 .LP
252 .nf
253 \fBwchar_t * \fR \fBwcswcs \fR ( \fBconst wchar_t * \fR \fIws1 \fR, \fBconst wchar_t * \fR
254 .fi

```

```

74 .fi
76 .LP
77 .nf
78 \fBsize_t\fR \fBwcssp\fr(\fBconst wchar_t *\fR\fIws1\fR, \fBconst wchar_t *\fR\
79 .fi
81 .LP
82 .nf
83 \fBsize_t\fR \fBwcscsp\fr(\fBconst wchar_t *\fR\fIws1\fR, \fBconst wchar_t *\fR\
84 .fi
86 .SS "XPG4, SUS, SUSv2, SUSv3"
87 .LP
88 .nf
89 \fBwchar_t *\fR\fBwcstok\fr(\fBwchar_t *restrict\fR \fIws1\fR, \fBconst wchar_t
90 .fi
92 .SS "Default and other standards"
93 .LP
94 .nf
95 \fBwchar_t *\fR\fBwcstok\fr(\fBwchar_t *\fR\fIws1\fR, \fBconst wchar_t *\fR\fIws
96 .fi
98 .LP
99 .nf
100 #include <wdec.h>
102 \fBwchar_t *\fR\fBwscat\fr(\fBwchar_t *\fR\fIws1\fR, \fBconst wchar_t *\fR\fIws2
103 .fi
105 .LP
106 .nf
107 \fBwchar_t *\fR\fBwsncat\fr(\fBwchar_t *\fR\fIws1\fR, \fBconst wchar_t *\fR\fIws
108 .fi
110 .LP
111 .nf
112 \fBint\fR \fBwscmp\fr(\fBconst wchar_t *\fR\fIws1\fR, \fBconst wchar_t *\fR\fIws
113 .fi
115 .LP
116 .nf
117 \fBint\fR \fBwsncmp\fr(\fBconst wchar_t *\fR\fIws1\fR, \fBconst wchar_t *\fR\fIw
118 .fi
120 .LP
121 .nf
122 \fBwchar_t *\fR\fBwscpy\fr(\fBwchar_t *\fR\fIws1\fR, \fBconst wchar_t *\fR\fIws2
123 .fi
125 .LP
126 .nf
127 \fBwchar_t *\fR\fBwsncpy\fr(\fBwchar_t *\fR\fIws1\fR, \fBconst wchar_t *\fR\fIws
128 .fi
130 .LP
131 .nf
132 \fBsize_t\fR \fBwslen\fr(\fBconst wchar_t *\fR\fIws\fR);
133 .fi
135 .LP
136 .nf
137 \fBwchar_t *\fR\fBwschr\fr(\fBconst wchar_t *\fR\fIws\fR, \fBwchar_t\fR \fIwc\fR
138 .fi

```

```

140 .LP
141 .nf
142 \fBwchar_t *\fR\fBwsrchr\fr(\fBconst wchar_t *\fR\fIws\fR, \fBwchar_t\fR \fIwc\f
143 .fi
145 .LP
146 .nf
147 \fBwchar_t *\fR\fBwspbrk\fr(\fBconst wchar_t *\fR\fIws1\fR, \fBconst wchar_t *\f
148 .fi
150 .LP
151 .nf
152 \fBsize_t\fR \fBwssp\fr(\fBconst wchar_t *\fR\fIws1\fR, \fBconst wchar_t *\fR\
153 .fi
155 .LP
156 .nf
157 \fBsize_t\fR \fBwscsp\fr(\fBconst wchar_t *\fR\fIws1\fR, \fBconst wchar_t *\fR\
158 .fi
160 .LP
161 .nf
162 \fBwchar_t *\fR\fBwstok\fr(\fBwchar_t *\fR\fIws1\fR, \fBconst wchar_t *\fR\fIws2
163 .fi
165 .LP
166 .nf
167 \fBwchar_t *\fR\fBwindex\fr(\fBconst wchar_t *\fR\fIws\fR, \fBwchar_t\fR \fIwc\f
168 .fi
170 .LP
171 .nf
172 \fBwchar_t *\fR\fBwrindex\fr(\fBconst wchar_t *\fR\fIws\fR, \fBwchar_t\fR \fIwc\
173 .fi
175 .SS "ISO C++"
176 .LP
177 .nf
178 #include <wchar.h>
180 \fBconst wchar_t *\fR\fBwcschr\fr(\fBconst wchar_t *\fR\fIws\fR, \fBwchar_t\fR \
181 .fi
183 .LP
184 .nf
185 \fBconst wchar_t *\fR\fBwcpbrk\fr(\fBconst wchar_t *\fR\fIws1\fR, \fBconst wcha
186 .fi
188 .LP
189 .nf
190 \fBconst wchar_t *\fR\fBwcsrchr\fr(\fBconst wchar_t *\fR\fIws\fR, \fBwchar_t\fR
191 .fi
193 .LP
194 .nf
195 #include <wchar>
197 \fBwchar_t *std::\fR\fBwcschr\fr(\fBwchar_t *\fR\fIws\fR, \fBwchar_t\fR \fIwc\fR
198 .fi
200 .LP
201 .nf
202 \fBwchar_t *std::\fR\fBwcpbrk\fr(\fBwchar_t *\fR\fIws1\fR, \fBconst wchar_t *\f
203 .fi
205 .LP

```

```

206 .nf
207 \fBwchar_t *std::\fR\fBwcsrchr\fR(\fBwchar_t *\fR\fIws\fR, \fBwchar_t\fR \fIwc\fR
208 .fi

210 .SH DESCRIPTION
211 .sp
212 .LP
213 These functions operate on wide-character strings terminated by \fBwchar_t\fR
214 \fINULL\fR characters. During appending or copying, these routines do not check
215 for an overflow condition of the receiving string. In the following, \fIws\fR,
216 \fIws1\fR, and \fIws2\fR point to wide-character strings terminated by a
217 \fBwchar_t NULL\fR.
218 .SS "wcsat(\fI), wcsat(\fI)"
219 .sp
220 .LP
221 The \fBwcsat(\fI)\fR and \fBwcsat(\fI)\fR functions append a copy of the
222 wide-character string pointed to by \fIws2\fR (including the terminating null
223 wide-character code) to the end of the wide-character string pointed to by
224 \fIws1 .
225 .Fa ws1 .
226 The initial wide-character code of
227 .Fa ws2
228 overwrites the null wide-character code at the end of
229 .Fa ws1 .
230 If copying takes place between
231 \fIws1\fR. The initial wide-character code of \fIws2\fR overwrites the null
232 wide-character code at the end of \fIws1\fR. If copying takes place between
233 objects that overlap, the behavior is undefined. Both functions return
234 .Fa ws1 ;
235 no return value is reserved to indicate an error.
236 .
237 .SS Fn wcsncat , wcsncat
238 .
239 .The
240 .Fn wcsncat
241 and
242 .Fn wcsncat
243 functions append not more than
244 .Fa n
245 \fIIs1\fR; no return value is reserved to indicate an error.
246 .SS "wcsncat(\fI), wcsncat(\fI)"
247 .sp
248 .LP
249 The \fBwcsncat(\fI)\fR and \fBwcsncat(\fI)\fR functions append not more than \fIIn\fR
250 wide-character codes (a null wide-character code and wide-character codes that
251 follow it are not appended) from the array pointed to by
252 .Fa ws2
253 to the end of the wide-character string pointed to by
254 .Fa ws1 .
255 .Fa ws1 .
256 The initial wide-character code of
257 .Fa ws2
258 overwrites the null wide-character code at the
259 end of
260 .Fa ws1 .
261 A terminating null wide-character code is always appended to
262 the result. Both functions return
263 .Fa ws1 ;
264 no return value is reserved to indicate an error.
265 .
266 .SS Fn wcsncmp , wcsncmp
267 .
268 .The
269 .Fn wcsncmp
270 and
271 .Fn wcsncmp
272 functions compare the wide-character string pointed to by
273 .Fa ws1

```

```

232 to the wide-character string pointed to by
233 .Fa ws2 .
234 The sign of a non-zero return value is determined by the sign of the
235 follow it are not appended) from the array pointed to by \fIws2\fR to the end
236 of the wide-character string pointed to by \fIws1\fR. The initial
237 wide-character code of \fIws2\fR overwrites the null wide-character code at the
238 end of \fIws1\fR. A terminating null wide-character code is always appended to
239 the result. Both functions return \fIws1\fR; no return value is reserved to
240 indicate an error.
241 .SS "wcsncmp(\fI), wcsncmp(\fI)"
242 .sp
243 .LP
244 The \fBwcsncmp(\fI)\fR and \fBwcsncmp(\fI)\fR functions compare the wide-character
245 string pointed to by \fIws1\fR to the wide-character string pointed to by
246 \fIws2\fR. The sign of a non-zero return value is determined by the sign of the
247 difference between the values of the first pair of wide-character codes that
248 differ in the objects being compared. Upon completion, both functions return an
249 integer greater than, equal to, or less than zero, if the wide-character string
250 pointed to by
251 .Fa ws1
252 is greater than, equal to, or less than the
253 wide-character string pointed to by
254 .Fa ws2 .
255 .
256 .SS Fn wcsncmp , wcsncmp
257 .
258 .The
259 .Fn wcsncmp
260 and
261 .Fn wcsncmp
262 functions compare not more than
263 .Fa n
264 pointed to by \fIws1\fR is greater than, equal to, or less than the
265 wide-character string pointed to by \fIws2\fR.
266 .SS "wcsncmp(\fI), wcsncmp(\fI)"
267 .sp
268 .LP
269 The \fBwcsncmp(\fI)\fR and \fBwcsncmp(\fI)\fR functions compare not more than \fIIn\fR
270 wide-character codes (wide-character codes that follow a null wide character
271 code are not compared) from the array pointed to by
272 .Fa ws1
273 to the array pointed to by
274 .Fa ws2 .
275 The sign of a non-zero return value is determined by
276 code are not compared) from the array pointed to by \fIws1\fR to the array
277 pointed to by \fIws2\fR. The sign of a non-zero return value is determined by
278 the sign of the difference between the values of the first pair of
279 wide-character codes that differ in the objects being compared. Upon successful
280 completion, both functions return an integer greater than, equal to, or less
281 than zero, if the possibly null-terminated array pointed to by
282 .Fa ws1
283 is
284 than zero, if the possibly null-terminated array pointed to by \fIws1\fR is
285 greater than, equal to, or less than the possibly null-terminated array pointed
286 to by
287 .Fa ws2 .
288 .
289 .SS Fn wcsncpy , wcsncpy
290 .
291 .The
292 .Fn wcsncpy
293 and
294 .Fn wcsncpy
295 functions copy the wide-character string
296 pointed to by
297 .Fa ws2

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```

277 (including the terminating null wide-character code)
278 into the array pointed to by
279 .Fa wsl .
280 If copying takes place between objects
281 that overlap, the behavior is undefined. Both functions return
282 .Fa wsl ;
283 no return value is reserved to indicate an error.
284 .
285 .Ss Fn wcsncpy , wcsncpy
286 .
287 The
288 .Fn wcsncpy
289 and
290 .Fn wcsncpy
291 functions copy not more than
292 .Fa n
293 to by \fIws2\fR.
294 .SS "wcsncpy(\fI), wcsncpy(\fI)"
295 .sp
296 .LP
297 The \fBwcsncpy(\fR and \fBwcsncpy(\fR functions copy the wide-character string
298 pointed to by \fIws2\fR (including the terminating null wide-character code)
299 into the array pointed to by \fIws1\fR. If copying takes place between objects
300 that overlap, the behavior is undefined. Both functions return \fIws1\fR; no
301 return value is reserved to indicate an error.
302 .SS "wcsncpy(\fI), wcsncpy(\fI)"
303 .sp
304 .LP
305 The \fBwcsncpy(\fR and \fBwcsncpy(\fR functions copy not more than \fIn\fR
306 wide-character codes (wide-character codes that follow a null wide character
307 code are not copied) from the array pointed to by
308 .Fa ws2
309 to the array pointed to by
310 .Fa wsl .
311 If copying takes place between objects that overlap,
312 the behavior is undefined. If the array pointed to by
313 .Fa ws2
314 is a wide-character string that is shorter than
315 .Fa n
316 wide-character codes, null
317 code are not copied) from the array pointed to by \fIws2\fR to the array
318 pointed to by \fIws1\fR. If copying takes place between objects that overlap,
319 the behavior is undefined. If the array pointed to by \fIws2\fR is a
320 wide-character string that is shorter than \fIn\fR wide-character codes, null
321 wide-character codes are appended to the copy in the array pointed to by
322 .Fa wsl ,
323 until a total
324 .Fa n
325 wide-character codes are written. Both
326 functions return
327 .Fa wsl ;
328 no return value is reserved to indicate an error.
329 .
330 .Ss Fn wcschr , wschr , windex
331 .
332 The
333 .Fn wcschr ,
334 .Fn wschr
335 and
336 .Fn windex
337 functions locate the first occurrence of
338 .Fa wc
339 in the wide-character string pointed to by
340 .Fa ws .
341 The value of
342 .Fa wc
343 must be a character representable as a type
344 .Vt wchar_t
345 and must be
346 .SS "wcschr(\fI), wschr(\fI)"
347 .sp
348 .LP
349 The \fBwcschr(\fR and \fBwschr(\fR functions locate the last occurrence of
350 \fIwc\fR in the wide-character string pointed to by \fIws\fR. The value of
351 \fIwc\fR must be a character representable as a type \fBwchar_t\fR and must be
352 a wide-character code corresponding to a valid character in the current locale.
353 The terminating null wide-character code is considered to be part of the
354 wide-character string. Upon successful completion, both functions return a
355 pointer to the wide-character code, or a null pointer if
356 .Fa wc
357 does not occur in the wide-character string.
358 .
359 .Ss wcsbrk , wspbrk
360 .
361 The
362 .Fn wcsbrk
363 and
364 .Fn wspbrk
365 functions locate the first occurrence in
366 the wide character string pointed to by
367 .Fa wsl
368 of any wide-character code
369 from the wide-character string pointed to by
370 .Fa ws2 .
371 Upon successful
372 pointer to the wide-character code, or a null pointer if \fIwc\fR does not

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326 must be a character representable as a type
327 .Vt wchar_t
328 and must be
329 \fIws1\fR, until a total \fIn\fR wide-character codes are written. Both
330 functions return \fIws1\fR; no return value is reserved to indicate an error.
331 .SS "wcslen(\fI), wslen(\fI)"
332 .sp
333 .LP
334 The \fBwcslen(\fR and \fBwslen(\fR functions compute the number of
335 wide-character codes in the wide-character string to which \fIws\fR points, not
336 including the terminating null wide-character code. Both functions return
337 \fIws\fR; no return value is reserved to indicate an error.
338 .SS "wcschr(\fI), wschr(\fI)"
339 .sp
340 .LP
341 The \fBwcschr(\fR and \fBwschr(\fR functions locate the first occurrence of
342 \fIwc\fR in the wide-character string pointed to by \fIws\fR. The value of
343 \fIwc\fR must be a character representable as a type \fBwchar_t\fR and must be
344 a wide-character code corresponding to a valid character in the current locale.
345 The terminating null wide-character code is considered to be part of the
346 wide-character string. Upon completion, both functions return a pointer to the
347 wide-character code, or a null pointer if the wide-character code is not found.
348 .
349 .Ss Fn wcsrchr , wsrchr , wrindex
350 .
351 The
352 .Fn wcsrchr ,
353 .Fn wsrchr
354 and
355 .Fn wrindex
356 functions locate the last occurrence of
357 .Fa wc
358 in the wide-character string pointed to by
359 .Fa ws .
360 The value of
361 .Fa wc
362 must be a character representable as a type
363 .Vt wchar_t
364 and must be
365 .SS "wcsrchr(\fI), wsrchr(\fI)"
366 .sp
367 .LP
368 The \fBwcsrchr(\fR and \fBwsrchr(\fR functions locate the last occurrence of
369 \fIwc\fR in the wide-character string pointed to by \fIws\fR. The value of
370 \fIwc\fR must be a character representable as a type \fBwchar_t\fR and must be
371 a wide-character code corresponding to a valid character in the current locale.
372 The terminating null wide-character code is considered to be part of the
373 wide-character string. Upon successful completion, both functions return a
374 pointer to the wide-character code, or a null pointer if
375 .Fa wc
376 does not occur in the wide-character string.
377 .
378 .Ss wcsbrk , wspbrk
379 .
380 The
381 .Fn wcsbrk
382 and
383 .Fn wspbrk
384 functions locate the first occurrence in
385 the wide character string pointed to by
386 .Fa wsl
387 of any wide-character code
388 from the wide-character string pointed to by
389 .Fa ws2 .
390 Upon successful
391 pointer to the wide-character code, or a null pointer if \fIwc\fR does not

```

```

310 occur in the wide-character string.
311 .SS "windex(\\), wrindex(\\)"
312 .sp
313 .LP
314 The \\fBwindex()\\fR and \\fBwrindex()\\fR functions behave the same as
315 \\fBwschr()\\fR and \\fBwsrchr()\\fR, respectively.
316 .SS "wcpbrk(\\), wspbrk(\\)"
317 .sp
318 .LP
319 The \\fBwcpbrk()\\fR and \\fBwspbrk()\\fR functions locate the first occurrence in
320 the wide character string pointed to by \\fIws1\\fR of any wide-character code
321 from the wide-character string pointed to by \\fIws2\\fR. Upon successful
322 completion, the function returns a pointer to the wide-character code, or a
323 null pointer if no wide-character code from
324 .Fa ws2
325 occurs in
326 .Fa ws1 .
327 .
328 .SS "wcswcs(\\)"
329 .
330 The
331 .Fn wcswcs
332 function locates the first occurrence in the wide-character
333 string pointed to by \\fIws1\\fR of the sequence of wide-character codes
334 (excluding the terminating null wide-character code) in the wide-character
335 string pointed to by
336 .Fa ws2 .
337 Upon successful completion, the function
338 string pointed to by \\fIws2\\fR. Upon successful completion, the function
339 returns a pointer to the located wide-character string, or a null pointer if
340 the wide-character string is not found. If
341 .Fa ws2
342 points to a wide-character
343 string with zero length, the function returns
344 .Fa ws1 .
345 .
346 .SS Fn wcsspncpy , wsspncpy
347 .
348 The
349 .Fn wcsspncpy
350 and
351 .Fn wsspncpy
352 functions return the length of the
353 maximum initial segment of the wide-character string pointed to by
354 .Fa ws1
355 the wide-character string is not found. If \\fIws2\\fR points to a wide-character
356 string with zero length, the function returns \\fIws1\\fR.
357 .SS "wcsspncpy(\\), wsspncpy(\\)"
358 .sp
359 .LP
360 The \\fBwcsspncpy()\\fR and \\fBwsspncpy()\\fR functions compute the length of the
361 maximum initial segment of the wide-character string pointed to by \\fIws1\\fR
362 which consists entirely of wide-character codes from the wide-character string
363 pointed to by
364 .Fa ws2 .
365 No return value is reserved to indicate an error.
366 .
367 .SS wcscspncpy , wcscspncpy

```

```

410 .
411 The
412 .Fn wcscspncpy
413 and
414 .Fn wcscspncpy
415 functions return the length of the
416 maximum initial segment of the wide-character string pointed to by
417 .Fa ws1
418 which consists entirely of wide-character codes
419 .Em not
420 from the
421 wide-character string pointed to by
422 .Fa ws2 .
423 No return value is reserved to indicate an error.
424 .
425 .SS wcstok , wstok
426 .
427 A sequence of calls to the
428 .Fn wcstok
429 and
430 .Fn wstok
431 functions break the wide-character string pointed to by
432 .Fa ws1
433 into a sequence of tokens, each
434 pointed to by \\fIws2\\fR. Both functions return the length \\fIws1\\fR; no return
435 value is reserved to indicate an error.
436 .SS "wcscspncpy(\\), wcscspncpy(\\)"
437 .sp
438 .LP
439 The \\fBwcscspncpy()\\fR and \\fBwcscspncpy()\\fR functions compute the length of the
440 maximum initial segment of the wide-character string pointed to by \\fIws1\\fR
441 which consists entirely of wide-character codes \\fInot\\fR from the
442 wide-character string pointed to by \\fIws2\\fR. Both functions return the length
443 of the initial substring of \\fIws1\\fR; no return value is reserved to indicate
444 an error.
445 .SS "wcstok(\\), wstok(\\)"
446 .sp
447 .LP
448 A sequence of calls to the \\fBwcstok()\\fR and \\fBwstok()\\fR functions break the
449 wide-character string pointed to by \\fIws1\\fR into a sequence of tokens, each
450 of which is delimited by a wide-character code from the wide-character string
451 pointed to by
452 .Fa ws2 .
453 The third argument points to a caller-provided
454 .Ft wchar_t
455 pointer into which
456 the
457 .Fn wcstok
458 function stores information necessary for it to continue
459 pointed to by \\fIws2\\fR.
460 .SS "Default and other standards"
461 .sp
462 .LP
463 The third argument points to a caller-provided \\fBwchar_t\\fR pointer into which
464 the \\fBwcstok()\\fR function stores information necessary for it to continue
465 scanning the same wide-character string. This argument is not available with
466 the XPG4 legacy version of
467 .Fn wcstok ,
468 nor is it available with the
469 .Fn wstok
470 function. See
471 .Xr standards 5 .
472 .
473 .LP
474 The first call in the sequence has
475 .Fa ws1
476 as its first argument, and is

```



```

364 the XPG4 and SUS versions of \fBwcstok()\fR, nor is it available with the
365 \fBwcstok()\fR function. See \fBstandards\fR(5).
366 .sp
367 .LP
368 The first call in the sequence has \fIws1\fR as its first argument, and is
454 followed by calls with a null pointer as their first argument. The separator
455 string pointed to by
456 .Fa ws2
457 may be different from call to call.
458 .LP
370 string pointed to by \fIws2\fR may be different from call to call.
371 .sp
372 .LP
459 The first call in the sequence searches the wide-character string pointed to by
460 .Fa ws1
461 for the first wide-character code that is
462 .Em not
463 contained in the current separator string pointed to by
464 .Fa ws2 .
465 If no such wide-character
374 \fIws1\fR for the first wide-character code that is \fInot\fR contained in the
375 current separator string pointed to by \fIws2\fR. If no such wide-character
466 code is found, then there are no tokens in the wide-character string pointed to
467 by
468 .Fa ws1 ,
469 and
470 .Fn wcstok
471 and
472 .Fn wstok
473 return a null pointer. If
377 by \fIws1\fR, and \fBwcstok()\fR and \fBwcstok()\fR return a null pointer. If
474 such a wide-character code is found, it is the start of the first token.
475 .LP
476 The
477 .Fn wcstok
478 and
479 .Fn wstok
480 functions then search from that point for
481 a wide-character code that
482 .Em is
483 contained in the current separator string.
379 .sp
380 .LP
381 The \fBwcstok()\fR and \fBwstok()\fR functions then search from that point for
382 a wide-character code that \fIis\fR contained in the current separator string.
484 If no such wide-character code is found, the current token extends to the end
485 of the wide-character string pointed to by
486 .Fa ws1 ,
487 and subsequent searches
384 of the wide-character string pointed to by \fIws1\fR, and subsequent searches
488 for a token will return a null pointer. If such a wide-character code is found,
489 it is overwritten by a null wide character, which terminates the current token.
490 The
491 .Fn wcstok
492 and
493 .Fn wstok
494 functions save a pointer to the following
495 wide-character code into thread-specific storage, from which the next
496 search for a token will start.
497 .LP
387 The \fBwcstok()\fR and \fBwstok()\fR functions save a pointer to the following
388 wide-character code, from which the next search for a token will start.
389 .sp
390 .LP
498 Each subsequent call, with a null pointer as the value of the first argument,
499 starts searching from the saved pointer and behaves as described above.

```

```

500 .Lp
393 .sp
394 .LP
501 Upon successful completion, both functions return a pointer to the first
502 wide-character code of a token. Otherwise, if there is no token, a null pointer
503 is returned.
504 .Sh CODE SET INDEPENDENCE
505 .Sy Enabled .
506 .Sh INTERFACE STABILITY
507 The
508 .Fn wscat ,
509 .Fn wcsncat ,
510 .Fn wcsncmp ,
511 .Fn wcsncpy ,
512 .Fn wcschr ,
513 .Fn wcsncpy ,
514 .Fn wcsrchr ,
515 .Fn wcsrchr ,
516 .Fn wcpbrk ,
517 .Fn wcssp ,
518 .Fn wcscspn ,
519 and
520 .Fn wcstok
521 functions are
522 .Sy Standard .
523 .Lp
524 The
525 .Fn wswcs
526 function is
527 .Sy Obsolete Standard .
528 .Lp
529 The
530 .Fn wscat ,
531 .Fn wsncat ,
532 .Fn wscmp ,
533 .Fn wsncmp ,
534 .Fn wscpy ,
535 .Fn wsncpy ,
536 .Fn wslen ,
537 .Fn wschr ,
538 .Fn wsrchr ,
539 .Fn wcpbrk ,
540 .Fn wssp ,
541 .Fn wstok ,
542 .Fn windex ,
543 and
544 .Fn wrindex
545 functions are
546 .Sy Obsolete Committed .
547 .
548 .Sh MT-LEVEL
549 .Sy MT-Safe .
550 Note however that the legacy version of
551 .Fn wcstok ,
552 as well as
553 .Fn wstok ,
554 use thread-specific storage to store the tokenizer state. As a result,
555 the tokenizer state will not be visible to other threads.
556 .Sh SEE ALSO
557 .Xr malloc 3C ,
558 .Xr string 3C ,
559 .Xr wcsdup 3C ,
560 .Xr wcslen 3C ,
561 .Xr wcsstr 3C ,
562 .Xr wcswidth 3C ,
563 .Xr wcwidth 3C ,

```

```

564 .Xr standards 5
565 .Sh STANDARDS
566 The
567 .Fn wcscat ,
568 .Fn wcsncat ,
569 .Fn wcsncmp ,
570 .Fn wcsncpy ,
571 .Fn wcschr ,
572 .Fn wcsrchr ,
573 .Fn wcsrchr ,
574 .Fn wcsrchr ,
575 .Fn wcsrchr ,
576 .Fn wcsrchr ,
577 .Fn wcsrchr ,
578 .Fn wcsrchr
579 and
580 .Fn wcsrchr
581 functions were introduced in
582 .St -xpg4 .
583 The
584 .Fn wcstok
585 function was modified to take a third argument in
586 .St -xbd5 .
587 The
588 .Fn wcsrchr
589 function was removed from
590 .St -p1003.1-2008 ;
591 the
592 .Xr wcsstr 3C
593 function specified by
594 .St -isoC-99
595 is preferred.
398 .SH ATTRIBUTES
399 .sp
400 .LP
401 See \fBattributes\fR(5) for descriptions of the following attributes:
402 .sp
404 .sp
405 .TS
406 box;
407 c | c
408 l | l .
409 ATTRIBUTE TYPE      ATTRIBUTE VALUE
410 -
411 CSI              Enabled
412 -
413 Interface Stability      See NOTES.
414 -
415 MT-Level          MT-Safe
416 .TE
418 .SH SEE ALSO
419 .sp
420 .LP
421 \fBmalloc\fR(3C), \fBstring\fR(3C), \fBwcsnwidth\fR(3C), \fBwcwidth\fR(3C),
422 \fBattributes\fR(5), \fBstandards\fR(5)
423 .SH NOTES
424 .sp
425 .LP
426 The \fBwcscat()\fR, \fBwcsncat()\fR, \fBwcsncmp()\fR, \fBwcsncpy()\fR,
427 \fBwcschr()\fR, \fBwcsrchr()\fR, \fBwcslen()\fR, \fBwscschr()\fR,
428 \fBwscsrchr()\fR, \fBwscsrchr()\fR, \fBwscswcs()\fR, \fBwscssp()\fR,
429 \fBwscscspn()\fR, and \fBwcstok()\fR functions are Standard. The \fBwcscat()\fR,
430 \fBwcsncat()\fR, \fBwcsncmp()\fR, \fBwcsncpy()\fR, \fBwscschr()\fR, \fBwscsrchr()\fR,
431 \fBwcslen()\fR, \fBwscschr()\fR, \fBwscsrchr()\fR, \fBwscswcs()\fR, \fBwscssp()\fR,

```

```

432 \fBwcstok()\fR, \fBwindex()\fR, and \fBwindex()\fR functions are Stable.

```

new/usr/src/man/man3c/wstring.3c

1

```
*****
3381 Sun Jul 27 18:01:35 2014
new/usr/src/man/man3c/wstring.3c
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wscasecmp (and friends), wsdup.
Various other tweaks and markup improvements.
*****
1 .\" Copyright 2014 Garrett D'Amore <garrett@damore.org>
2 .\" te
3 .\" Copyright (c) 1996, Sun Microsystems, Inc. All Rights Reserved
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5 .\" You can obtain a copy of the license at usr/src/OPENSOLARIS.LICENSE or http:
6 .\" When distributing Covered Code, include this CDDL HEADER in each file and in
7 .Dd "Jul 27, 2014"
8 .Dt WSTRING 3C
9 .Os
10 .Sh NAME
11 .Nm wstring ,
12 .Nm wscasecmp ,
13 .Nm wscasecmp ,
14 .Nm wsdup ,
15 .Nm wslen ,
16 .Nm wscol ,
17 .Nd legacy wide-character string handling
18 .Sh SYNOPSIS
19 .In widec.h
20 .Ft int
21 .Fo wscasecmp
22 .Fa "const wchar_t *s1"
23 .Fa "const wchar_t *s2"
24 .Fc
25 .Ft int
26 .Fo wscasecmp
27 .Fa "const wchar_t *s1"
28 .Fa "const wchar_t *s2"
29 .Fa int n"
30 .Fc
31 .
32 .Ft "wchar_t *"
33 .Fo wsdup
34 .Fa "const wchar_t *s"
35 .Fc
36 .
37 .Ft int
38 .Fo wscol
39 .Fa "const wchar_t *s"
40 .Fc
41 .
42 .Ft int
43 .Fo wslen
44 .Fa "const wchar_t *s"
45 .Fc
46 .
47 .Sh DESCRIPTION
48 These functions operate on wide-character strings. They are the historical
49 functions for performing operation on such strings, and have been superseded
50 by newer functions by various standards bodies. As such, their use is
51 deprecated and should be avoided in new applications.
52 .Lp
53 Wide-character strings
54 .Fa s1 ,
55 .Fa s2 ,
56 and
57 .Fa s
58 used in these functions are terminated by
```

new/usr/src/man/man3c/wstring.3c

2

```
59 null wide-characters. None of these functions check for overflow
60 conditions when appending to or copying strings.
61 .
62 .Ss Fn wscasecmp , wscasecmp
63 The
64 .Fn wscasecmp
65 and
66 .Fn wscasecmp
67 functions compares their arguments, ignoring differences in case according
68 to the current locale. Whereas
69 .Fn wscasecmp
70 continues comparing the strings until either a difference is found,
71 or the end of either string is reached, the
72 .Fn wscasecmp
73 function compares at most
74 .Fa n
75 wide-characters.
76 .Lp
77 The
78 .Fn wscasecmp
79 and
80 .Fn wscasecmp
81 functions have been superseded by
82 .Xr wscasecmp 3C
83 and
84 .Xr wscasecmp 3C ,
85 respectively, and behave identically to them.
86 .Lp
87 Note that for lexicographic comparisons, the four Extended Unix Code (EUC)
88 character sets are ordered from lowest to highest.
89 .
90 .Ss Fn wscol
91 .
92 The
93 .Fn wscol
94 function returns the width in screen columns required to display the
95 wide-character string
96 .Fa s .
97 This function has been superseded by
98 .Xr wscwidth
99 and behaves similarly to it.
100 .
101 .Ss Fn wsdup
102 .
103 The
104 .Fn wsdup
105 returns a duplicate copy of the wide-character string
106 .Fa s .
107 This function has been superseded by
108 .Xr wsdup 3C ,
109 and behaves identically to it.
110 .
111 .Ss Fn wslen
112 .
113 The
114 .Fn wslen
115 function returns the number of wide-characters in
116 .Fa s ,
117 excluding the terminating null wide-character code. This function has been
118 superseded by
119 .Xr wslen 3C ,
120 and behaves identically to it.
121 .
122 .Sh INTERFACE STABILITY
123 .Sy Obsolete Committed .
124 .Sh MT-LEVEL
```

```

125 .Sy MT-Safe .
126 .Sh SEE ALSO
127 .Xr malloc 3C ,
128 .Xr string 3C ,
129 .Xr wstring 3C ,
130 .Xr wcsasecmp 3C ,
131 .Xr wcsdup 3C ,
132 .Xr wcslen 3C ,
133 .Xr wcsncasecmp 3C ,
134 .Xr wcswidth 3C
6 .TH WSTRING 3C "Dec 29, 1996"
7 .SH NAME
8 wstring, wcsasecmp, wsncasecmp, wsdup, wscol \- Process Code string operations
9 .SH SYNOPSIS
10 .LP
11 .nf
12 #include <wchar.h>

14 \fBint\fR \fBwcsasecmp\fR(\fBconst wchar_t *\fR\fIs1\fR, \fBconst wchar_t *\fR\f
15 .fi

17 .LP
18 .nf
19 \fBint\fR \fBwsncasecmp\fR(\fBconst wchar_t *\fR\fIs1\fR, \fBconst wchar_t *\fR\
20 .fi

22 .LP
23 .nf
24 \fBwchar_t *\fR\fBwsdup\fR(\fBconst wchar_t *\fR\fIs\fR);
25 .fi

27 .LP
28 .nf
29 \fBint\fR \fBwscol\fR(\fBconst wchar_t *\fR\fIs\fR);
30 .fi

32 .SH DESCRIPTION
33 .sp
34 .LP
35 These functions operate on Process Code strings terminated by \fBwchar_t\fR
36 null characters. During appending or copying, these routines do not check for
37 an overflow condition of the receiving string. In the following, \fIs\fR,
38 \fIs1\fR, and \fIs2\fR point to Process Code strings terminated by a
39 \fBwchar_t\fR null.
40 .SS "wcsasecmp(\fI\), wsncasecmp(\fI\)"
41 .sp
42 .LP
43 The \fBwcsasecmp(\fR function compares its arguments, ignoring case, and
44 returns an integer greater than, equal to, or less than 0, depending upon
45 whether \fIs1\fR is lexicographically greater than, equal to, or less than
46 \fIs2\fR. It makes the same comparison but compares at most \fIn\fR Process
47 Code characters. The four Extended Unix Code (EUC) codesets are ordered from
48 lowest to highest as 0, 2, 3, 1 when characters from different codesets are
49 compared.
50 .SS "wsdup(\fI\)"
51 .sp
52 .LP
53 The \fBwsdup(\fR function returns a pointer to a new Process Code string,
54 which is a duplicate of the string pointed to by \fIs\fR. The space for the new
55 string is obtained using \fBmalloc\fR(3C). If the new string cannot be created,
56 a null pointer is returned.
57 .SS "wscol(\fI\)"
58 .sp
59 .LP
60 The \fBwscol(\fR function returns the screen display width (in columns) of the
61 Process Code string \fIs\fR.

```

```

62 .SH ATTRIBUTES
63 .sp
64 .LP
65 See \fBAttributes\fR(5) for descriptions of the following attributes:
66 .sp

68 .sp
69 .TS
70 box;
71 c | c
72 l | l .
73 ATTRIBUTE TYPE      ATTRIBUTE VALUE
74 _
75 MT-Level            MT-Safe
76 .TE

78 .SH SEE ALSO
79 .sp
80 .LP
81 \fBmalloc\fR(3C), \fBstring\fR(3C), \fBwstring\fR(3C), \fBAttributes\fR(5)

```

new/usr/src/man/man3head/timeb.h.3head

1

3041 Sun Jul 27 18:01:35 2014

new/usr/src/man/man3head/timeb.h.3head

Minor markup tweaks (Sy instead of Nm).

first round of POSIX 2008 stuff

```
1  \" Copyright 2014 Garrett D'Amore <garrett@damore.org>
1  \" te
2  \" Copyright (c) 2001, The IEEE and The Open Group. All Rights Reserved. Portio
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8  \" You can obtain a copy of the license at usr/src/OPENSOLARIS.LICENSE or http:
9  \" When distributing Covered Code, include this CDDL HEADER in each file and in
10 .Dd \"Jul 20, 2014\"
11 .Dt TIMEB.H 3HEAD
12 .Os
13 .Sh NAME
14 .Nm timeb.h, timeb
15 .Nd additional definitions for date and time
16 .Sh SYNOPSIS
17 .In sys/timeb.h
18 .Sh DESCRIPTION
19 The
20 .In sys/timeb.h
21 header defines the
22 .Ft timeb
23 structure, which includes the following members:
24 .Bl -column -offset indent \"unsigned short\" \"timezone\" \"more\"
25 .It Ft time_t Ft time ; seconds portion of current time
26 .It Ft unsigned short Ft millitm ; milliseconds portion of current time
27 .It Ft short Ft timezone ; local timezone in minutes west of Greenwich
28 .It Ft short Ft dstflag ; TRUE if Daylight Savings Time in effect
29 .El
30 .Lp
31 The
32 .Ft time_t
33 type is defined as described in
34 .In sys/types.h .
35 .Sh INTERFACE STABILITY
36 .Sy Obsolete Standard .
37 .Sh SEE ALSO
38 .Xr time.h 3HEAD ,
39 .Xr types.h 3HEAD ,
40 .Xr standards 5
41 .Sh STANDARDS
42 The
43 .In sys/timeb.h
44 header was introduced in
45 .St -xpg4.2 ,
46 and subsequently removed in
47 .St -p1003.1-2008 .
10 .TH TIMEB.H 3HEAD \"Sep 10, 2004\"
11 .SH NAME
12 timeb.h, timeb \- additional definitions for date and time
13 .SH SYNOPSIS
14 .LP
15 .nf
16 #include <\fBsys/timeb.h\fR>
17 .fi

19 .SH DESCRIPTION
20 .sp
21 .LP
```

new/usr/src/man/man3head/timeb.h.3head

2

22 The <\fBsys/timeb.h\fR> header defines the \fBtimeb\fR structure, which
23 includes the following members:

```
24 .sp
25 .in +2
26 .nf
27 time_t      time      /* the seconds portion of the current time */
28 unsigned short millitm /* the milliseconds portion of the current time */
29 short       timezone   /* the local timezone in minutes west of Greenwich */
30 short       dstflag    /* TRUE if Daylight Savings Time is in effect */
31 .fi
32 .in -2

34 .sp
35 .LP
36 The \fBtime_t\fR type is defined as described in <\fBsys/types.h\fR>.
37 .SH ATTRIBUTES
38 .sp
39 .LP
40 See \fBattributes\fR(5) for descriptions of the following attributes:
41 .sp

43 .sp
44 .TS
45 box;
46 c | c
47 l | l .
48 ATTRIBUTE TYPE  ATTRIBUTE VALUE
49 -
50 Interface Stability      Standard
51 .TE

53 .SH SEE ALSO
54 .sp
55 .LP
56 \fBtime.h\fR(3HEAD), \fBtypes.h\fR(3HEAD), \fBattributes\fR(5),
57 \fBstandards\fR(5)
```

2285 Sun Jul 27 18:01:35 2014
new/usr/src/man/man3head/ucontext.h.3head

Minor markup tweaks (Sy instead of Nm).

fix incorrect standard citations

first round of POSIX 2008 stuff

```

1  .\" Copyright 2014 Garrett D'Amore <garrett@damore.org>
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2  .\" Copyright 1989 AT&T Copyright (c) 2002, Sun Microsystems, Inc. All Rights
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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  .Dd \"Jul 20, 2014\"
7  .Dt UCONTEXT.H 3HEAD
8  .Os
9  .Sh NAME
10 .Nm ucontext.h, ucontext
11 .Nd user context
12 .Sh SYNOPSIS
13 .In ucontext.h
14 .Sh DESCRIPTION
15 The
16 .In ucontext.h
17 header defines the
18 .Ft ucontext_t
19 type as a structure that includes at least the following members:
20 .Bl -column -offset indent "ucontext_t" "uc_mcontext"
21 .It Ft ucontext_t Fa uc_link ;
22 .It Ft sigset_t Fa uc_sigmask ;
23 .It Ft stack_t Fa uc_stack ;
24 .It Ft mcontext_t Fa uc_mcontext ;
25 .El
26 .Lp
27 The
28 .Fa uc_link
29 member is a pointer to the context that to be resumed when
30 this context returns. If
31 .Fa uc_link
32 is equal to 0, this context is the main
33
34 .TH UCONTEXT.H 3HEAD "Aug 30, 2002"
35 .SH NAME
36 ucontext.h, ucontext \- user context
37 .SH SYNOPSIS
38 .Lp
39 .nf
40 #include <\fBucontext.h\fR>
41 .fi
42
43 .SH DESCRIPTION
44 .sp
45 .LP
46 The <\fBucontext.h\fR> header defines the \fBucontext_t\fR type as a structure
47 that includes at least the following members:
48 .sp
49 .in +2
50 .nf
51 ucontext_t uc_link
52 sigset_t uc_sigmask
53 stack_t uc_stack
54 mcontext_t uc_mcontext
55 .fi
56 .in -2
57
58 .sp
59 .LP

```

```

32 The \fBuc_link\fR member is a pointer to the context that to be resumed when
33 this context returns. If \fBuc_link\fR is equal to 0, this context is the main
34 context and the process exits when this context returns.
35 .Lp
36 The
37 .Fa uc_sigmask
38 member defines the set of signals that are blocked when
39 this context is active. See
40 .Xr sigprocmask 2 .
41 .Lp
42 The
43 .Fa uc_stack
44 member defines the stack used by this context. See
45 .Xr sigaltstack 2 .
46 .Lp
47 The
48 .Fa uc_mcontext
49 member contains the saved set of machine registers and
50 any implementation-specific context data. Portable applications should not
51 modify or access
52 .Fa uc_mcontext .
53 .Sh INTERFACE STABILITY
54 .Sy Obsolete Standard .
55 .Sh SEE ALSO
56 .Xr getcontext 2 ,
57 .Xr sigaction 2 ,
58 .Xr sigaltstack 2 ,
59 .Xr sigprocmask 2 ,
60 .Xr makecontext 3C ,
61 .Xr standards 5
62 .Sh STANDARDS
63 The
64 .In ucontext.h
65 header was introduced in
66 .St -xpg4.2 .
67 It was subsequently obsoleted in
68 .St -p1003.1-2001 ,
69 and removed in
70 .St -p1003.1-2008 .
71 modify or access \fBucontext_t\fR.
72 .Sh ATTRIBUTES
73 .sp
74 .LP
75 See \fBattributes\fR(5) for descriptions of the following attributes:
76 .sp
77
78 .sp
79 .TS
80 box;
81 c | c
82 l | l .
83 ATTRIBUTE TYPE ATTRIBUTE VALUE
84
85 _
86 Interface Stability Standard
87 .TE

```

```
64 .SH SEE ALSO
65 .sp
66 .LP
67 \fBgetcontext\fR(2), \fBsigaction\fR(2), \fBsigaltstack\fR(2),
68 \fBsigprocmask\fR(2), \fBmakecontext\fR(3C), \fBattributes\fR(5),
69 \fBstandards\fR(5)
```

new/usr/src/man/man3head/wchar.h.3head

1

```
*****
5201 Sun Jul 27 18:01:36 2014
new/usr/src/man/man3head/wchar.h.3head
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wcscasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
*****
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9 .\" When distributing Covered Code, include this CDDL HEADER in each file and in
10 .Dd \"Jul 27, 2014\"
11 .Dt WCHAR.H 3HEAD
12 .Os
13 .Sh NAME
14 .Nm wchar.h ,
15 .Nm wchar
16 .Nd wide-character handling
17 .Sh SYNOPSIS
18 .In wchar.h
19 .Sh DESCRIPTION
20 The
21 .In wchar.h
22 header defines the following types:
23 .Bl -tag -width Vt
24 .
25 .It Vt wchar_t
26 As described in
27 .In stddef.h .
28 .
29 .It Vt wint_t
30 An integer type capable of storing any valid value of
31 .Vt wchar_t
32 or
33 .Dv WEOF .
34 .
35 .It Vt wctype_t
10 .TH WCHAR.H 3HEAD \"Sep 10, 2004\"
11 .SH NAME
12 wchar.h, wchar - wide-character handling
13 .SH SYNOPSIS
14 .LP
15 .nf
16 #include <fBwchar.h\fr>
17 .fi

19 .SH DESCRIPTION
20 .sp
21 .LP
22 The <fBwchar.h\fr> header defines the following types:
23 .sp
24 .ne 2
25 .na
26 \fB\fbwchar_t\fr\fr
27 .ad
28 .RS 13n
29 As described in <fBstddef.h\fr>.
30 .RE

32 .sp
```

new/usr/src/man/man3head/wchar.h.3head

2

```
33 .ne 2
34 .na
35 \fB\fbwint_t\fr\fr
36 .ad
37 .RS 13n
38 An integer type capable of storing any valid value of \fbwchar_t\fr or
39 \fbWEOF\fr.
40 .RE

42 .sp
43 .ne 2
44 .na
45 \fB\fbwctype_t\fr\fr
46 .ad
47 .RS 13n
36 A scalar type of a data object that can hold values which represent
37 locale-specific character classification.
38 .
39 .It Vt locale_t
40 As described in
41 .In locale.h .
42 .
43 .It Vt mbstate_t
44 .RE

52 .sp
53 .ne 2
54 .na
55 \fB\fbmbstate_t\fr\fr
56 .ad
57 .RS 13n
44 An object type other than an array type that can hold the conversion state
45 information necessary to convert between sequences of (possibly multi-byte)
46 characters and wide characters. If a codeset is being used such that an
47 .Vt mbstate_t
48 needs to preserve more than two levels of reserved state, the
61 \fbmbstate_t\fr needs to preserve more than two levels of reserved state, the
49 results are unspecified.
50 .
51 .It Vt FILE
52 As described in
53 .In stdio.h .
54 .
55 .It Vt size_t
56 As described in
57 .In stddef.h .
58 .
59 .It Vt va_list
60 As described in
61 .In stdarg.h .
62 .El
63 .
64 .Lp
65 .RE

65 .sp
66 .ne 2
67 .na
68 \fB\fbFILE\fr\fr
69 .ad
70 .RS 13n
71 As described in <fBstdio.h\fr>.
72 .RE

74 .sp
75 .ne 2
```



```

76 .na
77 \fB\fBsize_t\fR\fR
78 .ad
79 .RS 13n
80 As described in <\fBstddef.h\fR>.
81 .RE

83 .sp
84 .ne 2
85 .na
86 \fB\fBva_list\fR\fR
87 .ad
88 .RS 13n
89 As described in <\fBstdarg.h\fR>.
90 .RE

92 .sp
93 .LP
94 The implementation supports one or more programming environments in which the
95 width of
96 width of
97 .Vt wint_t
98 is no greater than the width of type
99 .Vt long .
100 The names of these programming environments can be obtained using the
101 .Xr confstr 3C
102 function or the
103 .Xr getconf 1
104 utility.
105 .LP
106 The
107 .In wchar.h
108 header defines the following macros:
109 .Bl -tag -width Dv
110 .
111 .It Dv WCHAR_MAX
112 The maximum value representable by an object of type
113 .Vt wchar_t .
114 .
115 .It Dv WCHAR_MIN
116 The minimum value representable by an object of type
117 .Vt wchar_t .
118 .
119 .It Dv WEOF
120 Constant expression of type
121 .Vt wint_t
122 that is returned by certain wide-character functions to indicate end-of-file.
123 .
124 .It Dv NULL
125 As described in
126 .In stddef.h .
127 .El
128 .LP
129 The tag
130 .Vt tm
131 is declared as naming an incomplete structure type, the
132 contents of which are described in the header
133 .In time.h .
134 .LP
135 Inclusion of the
136 .In wchar.h
137 header can make visible all symbols from the headers
138 .In ctype.h ,
139 .In string.h ,
140 .In stdarg.h ,
141 .In stddef.h ,
142 .In stdio.h ,

```

```

113 .In stdlib.h ,
114 and
115 .In time.h .
116 .Sh INTERFACE STABILITY
117 .Sy Standard .
118 .Sh SEE ALSO
119 .Xr getconf 1 ,
120 .Xr btowc 3C ,
121 .Xr confstr 3C ,
122 .Xr fgetwc 3C ,
123 .Xr getws 3C ,
124 .Xr fputwc 3C ,
125 .Xr fputws 3C ,
126 .Xr fwide 3C ,
127 .Xr fwprintf 3C ,
128 .Xr fwscanf 3C ,
129 .Xr getwc 3C ,
130 .Xr getwchar 3C ,
131 .Xr iswalph 3C ,
132 .Xr iswctype 3C ,
133 .Xr mbsinit 3C ,
134 .Xr mbrlen 3C ,
135 .Xr mbrtowc 3C ,
136 .Xr mbsrtowcs 3C ,
137 .Xr towlower 3C ,
138 .Xr towupper 3C ,
139 .Xr ungetwc 3C ,
140 .Xr vfwprintf 3C ,
141 .Xr wctomb 3C ,
142 .Xr wcsrtombs 3C ,
143 .Xr wcsstring 3C ,
144 .Xr wcsstr 3C ,
145 .Xr wcstod 3C ,
146 .Xr wcscoll 3C ,
147 .Xr wcsdup 3C ,
148 .Xr wcsftime 3C ,
149 .Xr wcslen 3C ,
150 .Xr wcstol 3C ,
151 .Xr wcstoul 3C ,
152 .Xr wcswidth 3C ,
153 .Xr wcsxfrm 3C ,
154 .Xr wctob 3C ,
155 .Xr wctype 3C ,
156 .Xr wcwidth 3C ,
157 .Xr wmemchr 3C ,
158 .Xr wmemcmp 3C ,
159 .Xr wmemcpy 3C ,
160 .Xr wmemmove 3C ,
161 .Xr wmemset 3C ,
162 .Xr stdarg 3EXT ,
163 .Xr stddef.h 3HEAD ,
164 .Xr stdio.h 3HEAD ,
165 .Xr stdlib.h 3HEAD ,
166 .Xr string.h 3HEAD ,
167 .Xr time.h 3HEAD ,
168 .Xr wctype.h 3HEAD ,
169 .Xr standards 5)
170 .Sh STANDARDS
171 The
172 .In wchar.h
173 header was introduced in
174 .St -xpg4 .
175 width of \fBwint_t\fR is no greater than the width of type \fBlong\fR. The
176 names of these programming environments can be obtained using the
177 \fBconfstr\fR(3C) function or the \fBgetconf\fR(1) utility.
178 .sp

```

```

99 .LP
100 The <fBwchar.h\fr> header defines the following macros:
101 .sp
102 .ne 2
103 .na
104 \fB\fBWCCHAR_MAX\fr\fr
105 .ad
106 .RS 13n
107 The maximum value representable by an object of type \fBwchar_t\fr.
108 .RE

110 .sp
111 .ne 2
112 .na
113 \fB\fBWCCHAR_MIN\fr\fr
114 .ad
115 .RS 13n
116 The minimum value representable by an object of type \fBwchar_t\fr.
117 .RE

119 .sp
120 .ne 2
121 .na
122 \fB\fBWEOF\fr\fr
123 .ad
124 .RS 13n
125 Constant expression of type \fBwint_t\fr that is returned by several WP
126 functions to indicate end-of-file.
127 .RE

129 .sp
130 .ne 2
131 .na
132 \fB\fBNULL\fr\fr
133 .ad
134 .RS 13n
135 As described in <\fBstddef.h\fr>.
136 .RE

138 .sp
139 .LP
140 The tag \fBtm\fr is declared as naming an incomplete structure type, the
141 contents of which are described in the header <\fBtime.h\fr>.
142 .sp
143 .LP
144 Inclusion of the <\fBwchar.h\fr> header can make visible all symbols from the
145 headers <\fBctype.h\fr>, <\fBstring.h\fr>, <\fBstdarg.h\fr>, <\fBstddef.h\fr>,
146 <\fBstdio.h\fr>, <\fBstdlib.h\fr>, and <\fBtime.h\fr>.
147 .SH ATTRIBUTES
148 .sp
149 .LP
150 See \fBAttributes\fr(5) for descriptions of the following attributes:
151 .sp

153 .sp
154 .TS
155 box;
156 c | c
157 l | l .
158 ATTRIBUTE TYPE    ATTRIBUTE VALUE
159 _
160 Interface Stability    Standard
161 .TE

163 .SH SEE ALSO
164 .sp

```

```

165 .LP
166 \fB\fBgetconf\fr(1), \fB\fBtowc\fr(3C), \fB\fBconfstr\fr(3C), \fB\fBgetwc\fr(3C),
167 \fB\fBgetws\fr(3C), \fB\fBputwc\fr(3C), \fB\fBputws\fr(3C), \fB\fBwide\fr(3C),
168 \fB\fBwprintf\fr(3C), \fB\fBwscanf\fr(3C), \fB\fBgetwc\fr(3C), \fB\fBgetwchar\fr(3C),
169 \fB\fBiswalpha\fr(3C), \fB\fBiswctype\fr(3C), \fB\fBmbsinit\fr(3C), \fB\fBmbrlen\fr(3C),
170 \fB\fBmbrtowc\fr(3C), \fB\fBmbsrtowcs\fr(3C), \fB\fBtowlower\fr(3C), \fB\fBtoupper\fr(3C),
171 \fB\fBungetwc\fr(3C), \fB\fBvwprintf\fr(3C), \fB\fBwrtomb\fr(3C), \fB\fBwcsrtombs\fr(3C),
172 \fB\fBwcstring\fr(3C), \fB\fBwcsstr\fr(3C), \fB\fBwcstod\fr(3C), \fB\fBwcscoll\fr(3C),
173 \fB\fBwcsftime\fr(3C), \fB\fBwcstol\fr(3C), \fB\fBwcstoul\fr(3C), \fB\fBwcswidth\fr(3C),
174 \fB\fBwcsxfrm\fr(3C), \fB\fBwctob\fr(3C), \fB\fBwctype\fr(3C), \fB\fBwcwidth\fr(3C),
175 \fB\fBwmemchr\fr(3C), \fB\fBwmemcmp\fr(3C), \fB\fBwmemcpy\fr(3C), \fB\fBwmemmove\fr(3C),
176 \fB\fBwmemset\fr(3C), \fB\fBstdarg\fr(3EXT), \fB\fBstddef.h\fr(3HEAD),
177 \fB\fBstdio.h\fr(3HEAD), \fB\fBstdlib.h\fr(3HEAD), \fB\fBstring.h\fr(3HEAD),
178 \fB\fBtime.h\fr(3HEAD), \fB\fBwctype.h\fr(3HEAD), \fB\fBattributes\fr(5),
179 \fB\fBstandards\fr(5)

```

new/usr/src/man/man3lib/libc.3lib

1

```
*****
30323 Sun Jul 27 18:01:36 2014
new/usr/src/man/man3lib/libc.3lib
add wscasecmp & friends
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wscasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
*****
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6.\" Copyright 2011 by Delphix. All rights reserved.
7.Dd \"Jul 27, 2014\"
8.Dt LIBC 3LIB
9.Os
10.Sh NAME
11.Nm libc
12.Nd C library
13.Sh DESCRIPTION
14.TH LIBC 3LIB \"Jul 1, 2014\"
15.SH NAME
16.libc \- C library
17.SH DESCRIPTION
18.LP
19.Functions in this library provide various facilities defined by System V, ANSI
20.C, POSIX, and so on. See
21.Xr standards 5 .
22.In addition, those facilities
23.C, POSIX, and so on. See \fBstandards\fR(5). In addition, those facilities
24previously defined in the internationalization and the wide-character libraries
25are now defined in this library, as are the facilities previously defined in
26the multithreading libraries,
27.Xr libthread 3LIB
28and
29.Xr libpthread 3LIB .
30.Sh INTERFACES
31The shared object
32.Pa libc.so.1
33provides the public interfaces defined below.
34See
35.Xr Intro 3
36for additional information on shared object interfaces.
37.Lp
38.Bl -column -offset indent -compact
39.Sy __loc1
40.Sy __errno
41.Sy __builtin_alloca
42.Sy __ctype
43.Sy __fbufsize
44.Sy __flbf
45.Sy __flt_rounds
46.Sy __fpending
47.Sy __fpurge
48.Sy __freadable
49.Sy __freading
50.Sy __fsetlocking
51.Sy __fwritable
52.Sy __fwriting
53.Sy __huge_val
54.Sy __iob
55.Sy __loc1
56.Sy __major
```

new/usr/src/man/man3lib/libc.3lib

2

```
51.Sy __makedev
52.Sy __mb_cur_max_1
53.Sy __minor
54.Sy __nsw_extended_action
55.Sy __nsw_freeconfig
56.Sy __nsw_getconfig
57.Sy __posix_asctime_r
58.Sy __posix_ctime_r
59.Sy __posix_getgrgid_r
60.Sy __posix_getgrnam_r
61.Sy __posix_getlogin_r
62.Sy __posix_getpwnam_r
63.Sy __posix_getpwuid_r
64.Sy __posix_sigwait
65.Sy __posix_ttyname_r
66.Sy __prioset
67.Sy __priosetset
68.Sy __pthread_cleanup_pop
69.Sy __pthread_cleanup_push
70.Sy __sysconf_xpg5
71.Sy __xpg4
72.Sy __xpg4_putmsg
73.Sy __xpg4_putpmsg
74.Sy __Exit
75.Sy __altzone
76.Sy __assert
77.Sy __cleanup
78.Sy __ctype
79.Sy __daylight
80.Sy __environ
81.Sy __exit
82.Sy __exithandle
83.Sy __filbuf
84.Sy __flsbuf
85.Sy __flushlbf
86.Sy __getdate_err
87.Sy __getdate_err_addr
88.Sy __iob
89.Sy __isnan
90.Sy __isnand
91.Sy __lwp_cond_broadcast
92.Sy __lwp_cond_reltimedwait
93.Sy __lwp_cond_signal
94.Sy __lwp_cond_timedwait
95.Sy __lwp_cond_wait
96.Sy __lwp_continue
97.Sy __lwp_info
98.Sy __lwp_kill
99.Sy __lwp_mutex_lock
100.Sy __lwp_mutex_trylock
101.Sy __lwp_mutex_unlock
102.Sy __lwp_self
103.Sy __lwp_sema_init
104.Sy __lwp_sema_post
105.Sy __lwp_sema_trywait
106.Sy __lwp_sema_wait
107.Sy __lwp_suspend
108.Sy __lwp_suspend2
109.Sy __modf
110.Sy __nextafter
111.Sy __nsc_trydoorcall
112.Sy __nss_XbyY_buf_alloc
113.Sy __nss_XbyY_buf_free
114.Sy __nss_netdb_aliases
115.Sy __numeric
116.Sy __scalb
```

```

117 .Sy _sibuf
118 .Sy _sobuf
119 .Sy _stack_grow
120 .Sy _sys_buslist
121 .Sy _sys_cldlist
122 .Sy _sys_fpelist
123 .Sy _sys_illlist
124 .Sy _sys_segvlst
125 .Sy _sys_siginfofstp
126 .Sy _sys_siglist
127 .Sy _sys_siglistn
128 .Sy _sys_siglistp
129 .Sy _sys_traplist
130 .Sy _timezone
131 .Sy _tolower
132 .Sy _toupper
133 .Sy _tzname
134 .Sy _xftw
135 .Sy a64l
136 .Sy abort
137 .Sy abs
138 .Sy access
139 .Sy acct
140 .Sy acl
141 .Sy addrtostr
142 .Sy addsev
143 .Sy addseverity
144 .Sy adjtime
145 .Sy aio_cancel
146 .Sy aio_error
147 .Sy aio_fsync
148 .Sy aio_read
149 .Sy aio_return
150 .Sy aio_suspend
151 .Sy aio_waitn
152 .Sy aio_write
153 .Sy aiocancel
154 .Sy aioread
155 .Sy aiowait
156 .Sy aiowrite
157 .Sy alarm
158 .Sy alphasort
159 .Sy altzone
160 .Sy ascftime
161 .Sy ascftime
162 .Sy asctime_r
163 .Sy asprintf
164 .Sy atexit
165 .Sy atof
166 .Sy atoi
167 .Sy atol
168 .Sy atoll
169 .Sy atomic_add_16
170 .Sy atomic_add_16_nv
171 .Sy atomic_add_32
172 .Sy atomic_add_32_nv
173 .Sy atomic_add_64
174 .Sy atomic_add_64_nv
175 .Sy atomic_add_8
176 .Sy atomic_add_8_nv
177 .Sy atomic_add_char
178 .Sy atomic_add_char_nv
179 .Sy atomic_add_int
180 .Sy atomic_add_int_nv
181 .Sy atomic_add_long
182 .Sy atomic_add_long_nv

```

```

183 .Sy atomic_add_ptr
184 .Sy atomic_add_ptr_nv
185 .Sy atomic_add_short
186 .Sy atomic_add_short_nv
187 .Sy atomic_and_16
188 .Sy atomic_and_16_nv
189 .Sy atomic_and_32
190 .Sy atomic_and_32_nv
191 .Sy atomic_and_64
192 .Sy atomic_and_64_nv
193 .Sy atomic_and_8
194 .Sy atomic_and_8_nv
195 .Sy atomic_and_uchar
196 .Sy atomic_and_uchar_nv
197 .Sy atomic_and_uint
198 .Sy atomic_and_uint_nv
199 .Sy atomic_and_ulong
200 .Sy atomic_and_ulong_nv
201 .Sy atomic_and_ushort
202 .Sy atomic_and_ushort_nv
203 .Sy atomic_cas_16
204 .Sy atomic_cas_32
205 .Sy atomic_cas_64
206 .Sy atomic_cas_8
207 .Sy atomic_cas_ptr
208 .Sy atomic_cas_uchar
209 .Sy atomic_cas_uint
210 .Sy atomic_cas_ulong
211 .Sy atomic_cas_ushort
212 .Sy atomic_clear_long_excl
213 .Sy atomic_dec_16
214 .Sy atomic_dec_16_nv
215 .Sy atomic_dec_32
216 .Sy atomic_dec_32_nv
217 .Sy atomic_dec_64
218 .Sy atomic_dec_64_nv
219 .Sy atomic_dec_8
220 .Sy atomic_dec_8_nv
221 .Sy atomic_dec_ptr
222 .Sy atomic_dec_ptr_nv
223 .Sy atomic_dec_uchar
224 .Sy atomic_dec_uchar_nv
225 .Sy atomic_dec_uint
226 .Sy atomic_dec_uint_nv
227 .Sy atomic_dec_ulong
228 .Sy atomic_dec_ulong_nv
229 .Sy atomic_dec_ushort
230 .Sy atomic_dec_ushort_nv
231 .Sy atomic_inc_16
232 .Sy atomic_inc_16_nv
233 .Sy atomic_inc_32
234 .Sy atomic_inc_32_nv
235 .Sy atomic_inc_64
236 .Sy atomic_inc_64_nv
237 .Sy atomic_inc_8
238 .Sy atomic_inc_8_nv
239 .Sy atomic_inc_ptr
240 .Sy atomic_inc_ptr_nv
241 .Sy atomic_inc_uchar
242 .Sy atomic_inc_uchar_nv
243 .Sy atomic_inc_uint
244 .Sy atomic_inc_uint_nv
245 .Sy atomic_inc_ulong
246 .Sy atomic_inc_ulong_nv
247 .Sy atomic_inc_ushort
248 .Sy atomic_inc_ushort_nv

```

```

249 .Sy atomic_or_16
250 .Sy atomic_or_16_nv
251 .Sy atomic_or_32
252 .Sy atomic_or_32_nv
253 .Sy atomic_or_64
254 .Sy atomic_or_64_nv
255 .Sy atomic_or_8
256 .Sy atomic_or_8_nv
257 .Sy atomic_or_uchar
258 .Sy atomic_or_uchar_nv
259 .Sy atomic_or_uint
260 .Sy atomic_or_uint_nv
261 .Sy atomic_or_ulong
262 .Sy atomic_or_ulong_nv
263 .Sy atomic_or_ushort
264 .Sy atomic_or_ushort_nv
265 .Sy atomic_set_long_excl
266 .Sy atomic_swap_16
267 .Sy atomic_swap_32
268 .Sy atomic_swap_64
269 .Sy atomic_swap_8
270 .Sy atomic_swap_ptr
271 .Sy atomic_swap_uchar
272 .Sy atomic_swap_uint
273 .Sy atomic_swap_ulong
274 .Sy atomic_swap_ushort
275 .Sy attropen
276 .Sy backtrace
277 .Sy backtrace_symbols
278 .Sy backtrace_symbols_fd
279 .Sy basename
280 .Sy bcmp
281 .Sy bcopy
282 .Sy bindtextdomain
283 .Sy bind_textdomain_codeset
284 .Sy brk
285 .Sy bsd_signal
286 .Sy bsearch
287 .Sy btowc
288 .Sy btowc_l
289 .Sy bzero
290 .Sy calloc
291 .Sy catclose
292 .Sy catgets
293 .Sy catopen
294 .Sy cfgetispeed
295 .Sy cfgetospeed
296 .Sy cfsetispeed
297 .Sy cfsetospeed
298 .Sy cftime
299 .Sy chdir
300 .Sy chmod
301 .Sy chown
302 .Sy chroot
303 .Sy clearerr
304 .Sy clock
305 .Sy clock_getres
306 .Sy clock_gettime
307 .Sy clock_nanosleep
308 .Sy clock_settime
309 .Sy close
310 .Sy closedir
311 .Sy closefrom
312 .Sy closelog
313 .Sy cond_broadcast
314 .Sy cond_destroy

```

```

315 .Sy cond_init
316 .Sy cond_reltimedwait
317 .Sy cond_signal
318 .Sy cond_timedwait
319 .Sy cond_wait
320 .Sy confstr
321 .Sy creat
322 .Sy crypt
323 .Sy crypt_genhash_impl
324 .Sy crypt_gensalt
325 .Sy crypt_gensalt_impl
326 .Sy csetcol
327 .Sy csetlen
328 .Sy ctermid
329 .Sy ctermid_r
330 .Sy ctime
331 .Sy ctime_r
332 .Sy cuserid
333 .Sy daemon
334 .Sy daylight
335 .Sy dbm_clearerr
336 .Sy dbm_close
337 .Sy dbm_delete
338 .Sy dbm_error
339 .Sy dbm_fetch
340 .Sy dbm_firstkey
341 .Sy dbm_nextkey
342 .Sy dbm_open
343 .Sy dbm_store
344 .Sy dcgettext
345 .Sy dcngettext
346 .Sy decimal_to_double
347 .Sy decimal_to_extended
348 .Sy decimal_to_quadruple
349 .Sy decimal_to_single
350 .Sy dgettext
351 .Sy difftime
352 .Sy directio
353 .Sy dirdfd
354 .Sy dirname
355 .Sy div
356 .Sy dladdr
357 .Sy dladdr1
358 .Sy dlclose
359 .Sy dldump
360 .Sy dlerror
361 .Sy dlinfo
362 .Sy dlmopen
363 .Sy dlopen
364 .Sy dlsym
365 .Sy dngettext
366 .Sy door_bind
367 .Sy door_call
368 .Sy door_create
369 .Sy door_cred
370 .Sy door_getparam
371 .Sy door_info
372 .Sy door_return
373 .Sy door_revoke
374 .Sy door_server_create
375 .Sy door_setparam
376 .Sy door_ucred
377 .Sy door_unbind
378 .Sy double_to_decimal
379 .Sy drand48
380 .Sy dup

```

```

381 .Sy dup2
382 .Sy duplocale
383 .Sy econvert
384 .Sy ecvt
385 .Sy enable_extended_FILE_stdio
386 .Sy encrypt
387 .Sy endgrent
388 .Sy endnetgrent
389 .Sy endpwent
390 .Sy endspent
391 .Sy endusershell
392 .Sy endutent
393 .Sy endutxent
394 .Sy environ
395 .Sy erand48
396 .Sy err
397 .Sy errno
398 .Sy errx
399 .Sy euccol
400 .Sy euclen
401 .Sy eucscol
402 .Sy execl
403 .Sy execle
404 .Sy execlp
405 .Sy execv
406 .Sy execve
407 .Sy execvp
408 .Sy exit
409 .Sy extended_to_decimal
410 .Sy faccessat
411 .Sy facl
412 .Sy fattach
413 .Sy fchdir
414 .Sy fchmod
415 .Sy fchmodat
416 .Sy fchown
417 .Sy fchownat
418 .Sy fchroot
419 .Sy fclose
420 .Sy fcntl
421 .Sy fconvert
422 .Sy fcvt
423 .Sy fdasynch
424 .Sy fdetach
425 .Sy fdopen
426 .Sy fdopendir
427 .Sy fdwalk
428 .Sy feof
429 .Sy ferrord
430 .Sy fflush
431 .Sy ffs
432 .Sy fgetattr
433 .Sy fgetc
434 .Sy fgetgrent
435 .Sy fgetgrent_r
436 .Sy fgetpos
437 .Sy fgetpwent
438 .Sy fgetpwent_r
439 .Sy fgets
440 .Sy fgetspent
441 .Sy fgetspent_r
442 .Sy fgetwc
443 .Sy fgetwc_l
444 .Sy fgetws
445 .Sy file_to_decimal
446 .Sy fileno

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447 .Sy finite
448 .Sy flockfile
449 .Sy fmtmsg
450 .Sy fnmatch
451 .Sy fopen
452 .Sy fork
453 .Sy fork1
454 .Sy forkall
455 .Sy forkallx
456 .Sy forkx
457 .Sy fpathconf
458 .Sy fpclass
459 .Sy fpgetmask
460 .Sy fpgetround
461 .Sy fpgetsticky
462 .Sy fprintf
463 .Sy fpsetmask
464 .Sy fpsetround
465 .Sy fpsetsticky
466 .Sy fputc
467 .Sy fputs
468 .Sy fputwc
469 .Sy fputws
470 .Sy fread
471 .Sy free
472 .Sy freelocale
473 .Sy freopen
474 .Sy frexp
475 .Sy fscanf
476 .Sy fseek
477 .Sy fseeko
478 .Sy fsetattr
479 .Sy fsetpos
480 .Sy fstat
481 .Sy fstatat
482 .Sy fstatfs
483 .Sy fstatvfs
484 .Sy fsync
485 .Sy ftell
486 .Sy ftello
487 .Sy ftime
488 .Sy ftok
489 .Sy ftruncate
490 .Sy ftrylockfile
491 .Sy ftw
492 .Sy func_to_decimal
493 .Sy funlockfile
494 .Sy futimens
495 .Sy futimesat
496 .Sy fwide
497 .Sy fwprintf
498 .Sy fwrite
499 .Sy fwscanf
500 .Sy gconvert
501 .Sy gcvt
502 .Sy getacct
503 .Sy getattrat
504 .Sy getc
505 .Sy getc_unlocked
506 .Sy getchar
507 .Sy getchar_unlocked
508 .Sy getcontext
509 .Sy getcpuid
510 .Sy getcwd
511 .Sy getdate
512 .Sy getdate_err

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513 .Sy getdents
514 .Sy getdtablesize
515 .Sy getegid
516 .Sy getenv
517 .Sy geteuid
518 .Sy getexecname
519 .Sy getextmntent
520 .Sy getgid
521 .Sy getgrent
522 .Sy getgrent_r
523 .Sy getgrgid
524 .Sy getgrgid_r
525 .Sy getgrnam
526 .Sy getgrnam_r
527 .Sy getgroups
528 .Sy gethomedir
529 .Sy gethostid
530 .Sy gethostname
531 .Sy gethrtime
532 .Sy gethrtime
533 .Sy getisax
534 .Sy getitimer
535 .Sy getloadavg
536 .Sy getlogin
537 .Sy getlogin_r
538 .Sy getmntany
539 .Sy getmntent
540 .Sy getmsg
541 .Sy getnetgrent
542 .Sy getnetgrent_r
543 .Sy getopt
544 .Sy getopt_clip
545 .Sy getopt_long
546 .Sy getopt_long_only
547 .Sy getpagesize
548 .Sy getpagesizes
549 .Sy getpass
550 .Sy getpassphrase
551 .Sy getpeerucred
552 .Sy getpflags
553 .Sy getpgid
554 .Sy getpgrp
555 .Sy getpid
556 .Sy getpmsg
557 .Sy getppid
558 .Sy getppriv
559 .Sy getpriority
560 .Sy getprojid
561 .Sy getpw
562 .Sy getpwent
563 .Sy getpwent_r
564 .Sy getpwnam
565 .Sy getpwnam_r
566 .Sy getpwuid
567 .Sy getpwuid_r
568 .Sy getrctl
569 .Sy getrlimit
570 .Sy getrusage
571 .Sy gets
572 .Sy getsid
573 .Sy getspent
574 .Sy getspent_r
575 .Sy getspnam
576 .Sy getspnam_r
577 .Sy getsubopt
578 .Sy gettaskid

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579 .Sy gettext
580 .Sy gettimeofday
581 .Sy gettxt
582 .Sy getuid
583 .Sy getusershell
584 .Sy getustack
585 .Sy getutent
586 .Sy getutid
587 .Sy getutline
588 .Sy getutmp
589 .Sy getutmpx
590 .Sy getutxent
591 .Sy getutxid
592 .Sy getutxline
593 .Sy getvfsany
594 .Sy getvfsent
595 .Sy getvfsfile
596 .Sy getvsspec
597 .Sy getw
598 .Sy getwc
599 .Sy getwc_l
600 .Sy getwchar
601 .Sy getwchar_l
602 .Sy getwd
603 .Sy getwidth
604 .Sy getws
605 .Sy getzoneid
606 .Sy getzoneidbyname
607 .Sy getzonenamebyid
608 .Sy glob
609 .Sy globfree
610 .Sy gmtime
611 .Sy gmtime_r
612 .Sy grantpt
613 .Sy gsignal
614 .Sy hasmntopt
615 .Sy hcreate
616 .Sy hdestroy
617 .Sy hsearch
618 .Sy iconv
619 .Sy iconv_close
620 .Sy iconv_open
621 .Sy imaxabs
622 .Sy imaxdiv
623 .Sy index
624 .Sy initgroups
625 .Sy initstate
626 .Sy innnetgr
627 .Sy insque
628 .Sy ioctl
629 .Sy is_system_labeled
630 .Sy isaexec
631 .Sy isalnum
632 .Sy isalnum_l
633 .Sy isalpha
634 .Sy isalpha_l
635 .Sy isascii
636 .Sy isastream
637 .Sy isatty
638 .Sy isblank
639 .Sy isblank_l
640 .Sy iscntrl
641 .Sy iscntrl_l
642 .Sy isdigit
643 .Sy isdigit_l
644 .Sy isenglish

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645 .Sy isgraph
646 .Sy isgraph_l
647 .Sy isideogram
648 .Sy islower
649 .Sy islower_l
650 .Sy isnan
651 .Sy isnand
652 .Sy isnanf
653 .Sy isnumber
654 .Sy isphonogram
655 .Sy isprint
656 .Sy isprint_l
657 .Sy ispunct
658 .Sy ispunct_l
659 .Sy issetugid
660 .Sy isspace
661 .Sy isspace_l
662 .Sy isspecial
663 .Sy isupper
664 .Sy isupper_l
665 .Sy iswalnum
666 .Sy iswalnum_l
667 .Sy iswalpha
668 .Sy iswalpha_l
669 .Sy iswblank
670 .Sy iswblank_l
671 .Sy iswcntrl
672 .Sy iswcntrl_l
673 .Sy iswctype
674 .Sy iswctype_l
675 .Sy iswdigit
676 .Sy iswdigit_l
677 .Sy iswideogram
678 .Sy iswideogram_l
679 .Sy iswgraph
680 .Sy iswgraph_l
681 .Sy iswhexnumber
682 .Sy iswhexnumber_l
683 .Sy iswlower
684 .Sy iswlower_l
685 .Sy iswnumber
686 .Sy iswnumber_l
687 .Sy iswphonogram
688 .Sy iswphonogram_l
689 .Sy iswprint
690 .Sy iswprint_l
691 .Sy iswpunct
692 .Sy iswpunct_l
693 .Sy iswspace
694 .Sy iswspace_l
695 .Sy iswspecial
696 .Sy iswspecial_l
697 .Sy iswupper
698 .Sy iswupper_l
699 .Sy iswxdigit
700 .Sy iswxdigit_l
701 .Sy isxdigit
702 .Sy isxdigit_l
703 .Sy jrand48
704 .Sy kill
705 .Sy killpg
706 .Sy l64a
707 .Sy labs
708 .Sy ladd
709 .Sy lchown
710 .Sy lckpddf

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711 .Sy lcong48
712 .Sy ldexp
713 .Sy ldivide
714 .Sy lexp10
715 .Sy lfind
716 .Sy lfmt
717 .Sy link
718 .Sy lio_listio
719 .Sy llabs
720 .Sy lldiv
721 .Sy llog10
722 .Sy llseek
723 .Sy lltostr
724 .Sy localeconv
725 .Sy localtime
726 .Sy localtime_r
727 .Sy lockf
728 .Sy logb
729 .Sy lone
730 .Sy longjmp
731 .Sy lrand48
732 .Sy lsearch
733 .Sy lseek
734 .Sy lshiftl
735 .Sy lstat
736 .Sy lsub
737 .Sy lten
738 .Sy lzero
739 .Sy madvise
740 .Sy makecontext
741 .Sy makeutx
742 .Sy malloc
743 .Sy mblen
744 .Sy mblen_l
745 .Sy mbrlen
746 .Sy mbrlen_l
747 .Sy mbrtowc
748 .Sy mbrtowc_l
749 .Sy mbsinit
750 .Sy mbsinit_l
751 .Sy mbsnrtowcs
752 .Sy mbsnrtowcs_l
753 .Sy mbsrtowcs
754 .Sy mbsrtowcs_l
755 .Sy mbstowcs
756 .Sy mbstowcs_l
757 .Sy mbtowc
758 .Sy mbtowc_l
759 .Sy memalign
760 .Sy membar_consumer
761 .Sy membar_enter
762 .Sy membar_exit
763 .Sy membar_producer
764 .Sy memccpy
765 .Sy memchr
766 .Sy memcmp
767 .Sy memcntl
768 .Sy memcpy
769 .Sy meminfo
770 .Sy memmove
771 .Sy memset
772 .Sy mincore
773 .Sy mkdir
774 .Sy mkfifo
775 .Sy mknod
776 .Sy mkstemp

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777 .Sy mktemp
778 .Sy mktime
779 .Sy mlock
780 .Sy mlockall
781 .Sy mmap
782 .Sy mmapobj
783 .Sy modctl
784 .Sy modf
785 .Sy modff
786 .Sy modutx
787 .Sy monitor
788 .Sy mount
789 .Sy mprotect
790 .Sy mq_close
791 .Sy mq_getattr
792 .Sy mq_notify
793 .Sy mq_open
794 .Sy mq_receive
795 .Sy mq_reltimedreceive_np
796 .Sy mq_reltimedsend_np
797 .Sy mq_send
798 .Sy mq_setattr
799 .Sy mq_timedreceive
800 .Sy mq_timedsend
801 .Sy mq_unlink
802 .Sy rand48
803 .Sy msgctl
804 .Sy msgget
805 .Sy msgids
806 .Sy msgrcv
807 .Sy msgsnap
808 .Sy msgsnd
809 .Sy msync
810 .Sy munlock
811 .Sy munlockall
812 .Sy munmap
813 .Sy mutex_consistent
814 .Sy mutex_destroy
815 .Sy mutex_init
816 .Sy mutex_lock
817 .Sy mutex_trylock
818 .Sy mutex_unlock
819 .Sy nanosleep
820 .Sy nextafter
821 .Sy newlocale
822 .Sy nfs_getfh
823 .Sy nftw
824 .Sy ngettext
825 .Sy nice
826 .Sy nl_langinfo
827 .Sy nl_langinfo_l
828 .Sy nrand48
829 .Sy nss_default_finders
830 .Sy nss_delete
831 .Sy nss_endent
832 .Sy nss_getent
833 .Sy nss_search
834 .Sy nss_setent
835 .Sy ntp_adjtime
836 .Sy ntp_gettime
837 .Sy open
838 .Sy openat
839 .Sy opendir
840 .Sy openlog
841 .Sy optarg
842 .Sy opterr

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843 .Sy optind
844 .Sy optopt
845 .Sy p_online
846 .Sy pathconf
847 .Sy pause
848 .Sy pclose
849 .Sy pcsample
850 .Sy perror
851 .Sy pfmt
852 .Sy pipe
853 .Sy plock
854 .Sy poll
855 .Sy popen
856 .Sy port_alert
857 .Sy port_associate
858 .Sy port_create
859 .Sy port_dissociate
860 .Sy port_get
861 .Sy port_getn
862 .Sy port_send
863 .Sy port_sendn
864 .Sy posix_fadvise
865 .Sy posix_fallocate
866 .Sy posix_madvise
867 .Sy posix_memalign
868 .Sy posix_openpt
869 .Sy posix_spawn
870 .Sy posix_spawn_file_actions_addclose
871 .Sy posix_spawn_file_actions_addclosefrom_np
872 .Sy posix_spawn_file_actions_adddup2
873 .Sy posix_spawn_file_actions_addopen
874 .Sy posix_spawn_file_actions_destroy
875 .Sy posix_spawn_file_actions_init
876 .Sy posix_spawn_pipe_np
877 .Sy posix_spawnattr_destroy
878 .Sy posix_spawnattr_getflags
879 .Sy posix_spawnattr_getpgroup
880 .Sy posix_spawnattr_getschedparam
881 .Sy posix_spawnattr_getschedpolicy
882 .Sy posix_spawnattr_getsigdefault
883 .Sy posix_spawnattr_getsigignore_np
884 .Sy posix_spawnattr_getsigmask
885 .Sy posix_spawnattr_init
886 .Sy posix_spawnattr_setflags
887 .Sy posix_spawnattr_setpgroup
888 .Sy posix_spawnattr_setschedparam
889 .Sy posix_spawnattr_setschedpolicy
890 .Sy posix_spawnattr_setsigdefault
891 .Sy posix_spawnattr_setsigignore_np
892 .Sy posix_spawnattr_setsigmask
893 .Sy posix_spawnnp
894 .Sy pread
895 .Sy printf
896 .Sy printstack
897 .Sy priocntl
898 .Sy priocntlset
899 .Sy priv_addset
900 .Sy priv_allocset
901 .Sy priv_copyset
902 .Sy priv_delset
903 .Sy priv_emptyset
904 .Sy priv_fillset
905 .Sy priv_freeset
906 .Sy priv_getbyname
907 .Sy priv_getbynum
908 .Sy priv_getsetbyname

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909 .Sy priv_getsetbynum
910 .Sy priv_gettext
911 .Sy priv_ineffect
912 .Sy priv_intersect
913 .Sy priv_inverse
914 .Sy priv_isemptyset
915 .Sy priv_isequalset
916 .Sy priv_isfullset
917 .Sy priv_ismember
918 .Sy priv_issubset
919 .Sy priv_set
920 .Sy priv_set_to_str
921 .Sy priv_str_to_set
922 .Sy priv_union
923 .Sy processor_bind
924 .Sy processor_info
925 .Sy profil
926 .Sy pselect
927 .Sy pset_assign
928 .Sy pset_bind
929 .Sy pset_create
930 .Sy pset_destroy
931 .Sy pset_getattr
932 .Sy pset_getloadavg
933 .Sy pset_info
934 .Sy pset_list
935 .Sy pset_setattr
936 .Sy psiginfo
937 .Sy psignal
938 .Sy pthread_atfork
939 .Sy pthread_attr_destroy
940 .Sy pthread_attr_getdetachstate
941 .Sy pthread_attr_getguardsize
942 .Sy pthread_attr_getinheritsched
943 .Sy pthread_attr_getschedparam
944 .Sy pthread_attr_getschedpolicy
945 .Sy pthread_attr_getscope
946 .Sy pthread_attr_getstack
947 .Sy pthread_attr_getstackaddr
948 .Sy pthread_attr_getstacksize
949 .Sy pthread_attr_init
950 .Sy pthread_attr_setdetachstate
951 .Sy pthread_attr_setguardsize
952 .Sy pthread_attr_setinheritsched
953 .Sy pthread_attr_setschedparam
954 .Sy pthread_attr_setschedpolicy
955 .Sy pthread_attr_setscope
956 .Sy pthread_attr_setstack
957 .Sy pthread_attr_setstackaddr
958 .Sy pthread_attr_setstacksize
959 .Sy pthread_barrier_destroy
960 .Sy pthread_barrier_init
961 .Sy pthread_barrier_wait
962 .Sy pthread_barrierattr_destroy
963 .Sy pthread_barrierattr_getpshared
964 .Sy pthread_barrierattr_init
965 .Sy pthread_barrierattr_setpshared
966 .Sy pthread_cancel
967 .Sy pthread_cond_broadcast
968 .Sy pthread_cond_destroy
969 .Sy pthread_cond_init
970 .Sy pthread_cond_reltimedwait_np
971 .Sy pthread_cond_signal
972 .Sy pthread_cond_timedwait
973 .Sy pthread_cond_wait
974 .Sy pthread_condattr_destroy

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975 .Sy pthread_condattr_getclock
976 .Sy pthread_condattr_getpshared
977 .Sy pthread_condattr_init
978 .Sy pthread_condattr_setclock
979 .Sy pthread_condattr_setpshared
980 .Sy pthread_create
981 .Sy pthread_detach
982 .Sy pthread_equal
983 .Sy pthread_exit
984 .Sy pthread_getconcurrency
985 .Sy pthread_getschedparam
986 .Sy pthread_getspecific
987 .Sy pthread_join
988 .Sy pthread_key_create
989 .Sy pthread_key_create_once_np
990 .Sy pthread_key_delete
991 .Sy pthread_kill
992 .Sy pthread_mutex_consistent
993 .Sy pthread_mutex_destroy
994 .Sy pthread_mutex_getprioceiling
995 .Sy pthread_mutex_init
996 .Sy pthread_mutex_lock
997 .Sy pthread_mutex_reltimedlock_np
998 .Sy pthread_mutex_setprioceiling
999 .Sy pthread_mutex_timedlock
1000 .Sy pthread_mutex_trylock
1001 .Sy pthread_mutex_unlock
1002 .Sy pthread_mutexattr_destroy
1003 .Sy pthread_mutexattr_getprioceiling
1004 .Sy pthread_mutexattr_getprotocol
1005 .Sy pthread_mutexattr_getpshared
1006 .Sy pthread_mutexattr_getrobust
1007 .Sy pthread_mutexattr_gettype
1008 .Sy pthread_mutexattr_init
1009 .Sy pthread_mutexattr_setprioceiling
1010 .Sy pthread_mutexattr_setprotocol
1011 .Sy pthread_mutexattr_setpshared
1012 .Sy pthread_mutexattr_setrobust
1013 .Sy pthread_mutexattr_settype
1014 .Sy pthread_once
1015 .Sy pthread_rwlock_destroy
1016 .Sy pthread_rwlock_init
1017 .Sy pthread_rwlock_rdlock
1018 .Sy pthread_rwlock_reltimedrdlock_np
1019 .Sy pthread_rwlock_reltimedwrlock_np
1020 .Sy pthread_rwlock_timedrdlock
1021 .Sy pthread_rwlock_timedwrlock
1022 .Sy pthread_rwlock_tryrdlock
1023 .Sy pthread_rwlock_trywrlock
1024 .Sy pthread_rwlock_unlock
1025 .Sy pthread_rwlock_wrlock
1026 .Sy pthread_rwlockattr_destroy
1027 .Sy pthread_rwlockattr_getpshared
1028 .Sy pthread_rwlockattr_init
1029 .Sy pthread_rwlockattr_setpshared
1030 .Sy pthread_self
1031 .Sy pthread_setcancelstate
1032 .Sy pthread_setcanceltype
1033 .Sy pthread_setconcurrency
1034 .Sy pthread_setspecific
1035 .Sy pthread_sigmask
1036 .Sy pthread_setschedparam
1037 .Sy pthread_setschedprio
1038 .Sy pthread_spin_destroy
1039 .Sy pthread_spin_init
1040 .Sy pthread_spin_lock

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1041 .Sy pthread_spin_trylock
1042 .Sy pthread_spin_unlock
1043 .Sy pthread_testcancel
1044 .Sy ptsname
1045 .Sy putacct
1046 .Sy putc
1047 .Sy putc_unlocked
1048 .Sy putchar
1049 .Sy putchar_unlocked
1050 .Sy putenv
1051 .Sy putmsg
1052 .Sy putpmsg
1053 .Sy putpwent
1054 .Sy puts
1055 .Sy putspent
1056 .Sy pututline
1057 .Sy pututxline
1058 .Sy putw
1059 .Sy putwc
1060 .Sy putwchar
1061 .Sy putws
1062 .Sy pwrite
1063 .Sy qeconvert
1064 .Sy qecvt
1065 .Sy qfconvert
1066 .Sy qfcvt
1067 .Sy qgconvert
1068 .Sy qgcvt
1069 .Sy qsort
1070 .Sy quadruple_to_decimal
1071 .Sy raise
1072 .Sy rand
1073 .Sy rand_r
1074 .Sy random
1075 .Sy rctl_walk
1076 .Sy rctlblk_get_enforced_value
1077 .Sy rctlblk_get_firing_time
1078 .Sy rctlblk_get_global_action
1079 .Sy rctlblk_get_global_flags
1080 .Sy rctlblk_get_local_action
1081 .Sy rctlblk_get_local_flags
1082 .Sy rctlblk_get_privilege
1083 .Sy rctlblk_get_recipient_pid
1084 .Sy rctlblk_get_value
1085 .Sy rctlblk_set_local_action
1086 .Sy rctlblk_set_local_flags
1087 .Sy rctlblk_set_privilege
1088 .Sy rctlblk_set_recipient_pid
1089 .Sy rctlblk_set_value
1090 .Sy rctlblk_size
1091 .Sy re_comp
1092 .Sy re_exec
1093 .Sy read
1094 .Sy readdir
1095 .Sy readdir_r
1096 .Sy readlink
1097 .Sy readv
1098 .Sy realloc
1099 .Sy realpath
1100 .Sy reboot
1101 .Sy regcmp
1102 .Sy regcomp
1103 .Sy regerror
1104 .Sy regex
1105 .Sy regexec
1106 .Sy regfree

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1107 .Sy remove
1108 .Sy remque
1109 .Sy rename
1110 .Sy renameat
1111 .Sy resetmnttab
1112 .Sy resolvepath
1113 .Sy rewind
1114 .Sy rewinddir
1115 .Sy rindex
1116 .Sy rmdir
1117 .Sy rw_rdlock
1118 .Sy rw_read_held
1119 .Sy rw_tryrdlock
1120 .Sy rw_trywrlock
1121 .Sy rw_unlock
1122 .Sy rw_write_held
1123 .Sy rw_wrlock
1124 .Sy rwlock_destroy
1125 .Sy rwlock_init
1126 .Sy sbrk
1127 .Sy scalb
1128 .Sy scandir
1129 .Sy scanf
1130 .Sy sched_get_priority_max
1131 .Sy sched_get_priority_min
1132 .Sy sched_getparam
1133 .Sy sched_getscheduler
1134 .Sy sched_rr_get_interval
1135 .Sy sched_setparam
1136 .Sy sched_setscheduler
1137 .Sy sched_yield
1138 .Sy schedctl_exit
1139 .Sy schedctl_init
1140 .Sy schedctl_lookup
1141 .Sy schedctl_start
1142 .Sy schedctl_stop
1143 .Sy seconvert
1144 .Sy seed48
1145 .Sy seekdir
1146 .Sy select
1147 .Sy sem_close
1148 .Sy sem_destroy
1149 .Sy sem_getvalue
1150 .Sy sem_init
1151 .Sy sem_open
1152 .Sy sem_post
1153 .Sy sem_reltimedwait_np
1154 .Sy sem_timedwait
1155 .Sy sem_trywait
1156 .Sy sem_unlink
1157 .Sy sem_wait
1158 .Sy sema_destroy
1159 .Sy sema_held
1160 .Sy sema_init
1161 .Sy sema_post
1162 .Sy sema_trywait
1163 .Sy sema_wait
1164 .Sy semctl
1165 .Sy semget
1166 .Sy semids
1167 .Sy semop
1168 .Sy semtimedop
1169 .Sy setattrat
1170 .Sy setbuf
1171 .Sy setbuffer
1172 .Sy setcat

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1173 .Sy setcontext
1174 .Sy setegid
1175 .Sy setenv
1176 .Sy seteuid
1177 .Sy setgid
1178 .Sy setgrent
1179 .Sy setgroups
1180 .Sy sethostname
1181 .Sy setitimer
1182 .Sy setjmp
1183 .Sy setkey
1184 .Sy setlabel
1185 .Sy setlinebuf
1186 .Sy setlocale
1187 .Sy setlogmask
1188 .Sy setnetgrent
1189 .Sy setpflags
1190 .Sy setpgid
1191 .Sy setpgrp
1192 .Sy setppriv
1193 .Sy setpriority
1194 .Sy setpwent
1195 .Sy setrctl
1196 .Sy setregid
1197 .Sy setreuid
1198 .Sy setrlimit
1199 .Sy setsid
1200 .Sy setspent
1201 .Sy setstate
1202 .Sy settaskid
1203 .Sy settimeofday
1204 .Sy setuid
1205 .Sy setusershell
1206 .Sy setustack
1207 .Sy setutent
1208 .Sy setutxent
1209 .Sy setvbuf
1210 .Sy sfconvert
1211 .Sy sgconvert
1212 .Sy shm_open
1213 .Sy shm_unlink
1214 .Sy shmat
1215 .Sy shmctl
1216 .Sy shmdt
1217 .Sy shmget
1218 .Sy shmids
1219 .Sy sig2str
1220 .Sy sigaction
1221 .Sy sigaddset
1222 .Sy sigaltstack
1223 .Sy sigdelset
1224 .Sy sigemptyset
1225 .Sy sigfillset
1226 .Sy sigfpe
1227 .Sy sighold
1228 .Sy sigignore
1229 .Sy siginterrupt
1230 .Sy sigismember
1231 .Sy siglongjmp
1232 .Sy signal
1233 .Sy sigpause
1234 .Sy sigpending
1235 .Sy sigprocmask
1236 .Sy sigqueue
1237 .Sy sigrelse
1238 .Sy sigsend
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1239 .Sy sigsendset
1240 .Sy sigset
1241 .Sy sigsetjmp
1242 .Sy sigstack
1243 .Sy sigsuspend
1244 .Sy sigtimedwait
1245 .Sy sigwait
1246 .Sy sigwaitinfo
1247 .Sy single_to_decimal
1248 .Sy sleep
1249 .Sy snprintf
1250 .Sy sprintf
1251 .Sy srand
1252 .Sy srand48
1253 .Sy srandom
1254 .Sy sscanf
1255 .Sy ssignal
1256 .Sy stack_getbounds
1257 .Sy stack_inbounds
1258 .Sy stack_setbounds
1259 .Sy stack_violation
1260 .Sy stat
1261 .Sy statfs
1262 .Sy statvfs
1263 .Sy stime
1264 .Sy str2sig
1265 .Sy strcasecmp
1266 .Sy strcasecmp_l
1267 .Sy strcat
1268 .Sy strchr
1269 .Sy strcmp
1270 .Sy strcoll
1271 .Sy strcpy
1272 .Sy strcspn
1273 .Sy strdup
1274 .Sy strerror
1275 .Sy strerror_r
1276 .Sy strfmon
1277 .Sy strfmon_l
1278 .Sy strftime
1279 .Sy strftime_l
1280 .Sy string_to_decimal
1281 .Sy strlcat
1282 .Sy strlcpy
1283 .Sy strlen
1284 .Sy strncasecmp
1285 .Sy strncasecmp_l
1286 .Sy strncat
1287 .Sy strncmp
1288 .Sy strncpy
1289 .Sy strpbrk
1290 .Sy strptime
1291 .Sy strptime_l
1292 .Sy strrchr
1293 .Sy strsep
1294 .Sy strsignal
1295 .Sy strspn
1296 .Sy strstr
1297 .Sy strtod
1298 .Sy strtod
1299 .Sy strtodimax
1300 .Sy strtok
1301 .Sy strtok_r
1302 .Sy strtol
1303 .Sy strtold
1304 .Sy strtoll
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1305 .Sy strtoul
1306 .Sy strtoull
1307 .Sy strtoumax
1308 .Sy strtows
1309 .Sy strxfrm
1310 .Sy swab
1311 .Sy swapcontext
1312 .Sy swapctl
1313 .Sy swprintf
1314 .Sy swscanf
1315 .Sy symlink
1316 .Sy sync
1317 .Sy sync_instruction_memory
1318 .Sy sysconf
1319 .Sy sysfs
1320 .Sy sysinfo
1321 .Sy syslog
1322 .Sy system
1323 .Sy tcdrain
1324 .Sy tcflow
1325 .Sy tcflush
1326 .Sy tcgetattr
1327 .Sy tcgetpgrp
1328 .Sy tcgetsid
1329 .Sy tcseendbreak
1330 .Sy tcsetattr
1331 .Sy tcsetpgrp
1332 .Sy tdelete
1333 .Sy tell
1334 .Sy telldir
1335 .Sy tempnam
1336 .Sy textdomain
1337 .Sy tfind
1338 .Sy thr_continue
1339 .Sy thr_create
1340 .Sy thr_exit
1341 .Sy thr_getconcurrency
1342 .Sy thr_getprio
1343 .Sy thr_getspecific
1344 .Sy thr_join
1345 .Sy thr_keycreate
1346 .Sy thr_keycreate_once
1347 .Sy thr_kill
1348 .Sy thr_main
1349 .Sy thr_min_stack
1350 .Sy thr_self
1351 .Sy thr_setconcurrency
1352 .Sy thr_setprio
1353 .Sy thr_setspecific
1354 .Sy thr_sigsetmask
1355 .Sy thr_stksegment
1356 .Sy thr_suspend
1357 .Sy thr_yield
1358 .Sy time
1359 .Sy timer_create
1360 .Sy timer_delete
1361 .Sy timer_getoverrun
1362 .Sy timer_gettime
1363 .Sy timer_settime
1364 .Sy times
1365 .Sy timezone
1366 .Sy tmpfile
1367 .Sy tmpnam
1368 .Sy tmpnam_r
1369 .Sy toascii
1370 .Sy tolower

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```

1371 .Sy tolower_1
1372 .Sy toupper
1373 .Sy toupper_1
1374 .Sy towctrans
1375 .Sy towctrans_1
1376 .Sy tolower
1377 .Sy tolower_1
1378 .Sy toupper
1379 .Sy toupper_1
1380 .Sy truncate
1381 .Sy tsearch
1382 .Sy ttyname
1383 .Sy ttyname_r
1384 .Sy ttyslot
1385 .Sy twalk
1386 .Sy tzname
1387 .Sy tzset
1388 .Sy u8_strcmp
1389 .Sy u8_textprep_str
1390 .Sy u8_validate
1391 .Sy uadmin
1392 .Sy ualarm
1393 .Sy uconv_u16tou32
1394 .Sy uconv_u16tou8
1395 .Sy uconv_u32tou16
1396 .Sy uconv_u32tou8
1397 .Sy uconv_u8tou16
1398 .Sy uconv_u8tou32
1399 .Sy ucred_free
1400 .Sy ucred_get
1401 .Sy ucred_getegid
1402 .Sy ucred_geteuid
1403 .Sy ucred_getgroups
1404 .Sy ucred_getpflags
1405 .Sy ucred_getpid
1406 .Sy ucred_getprivset
1407 .Sy ucred_getprojid
1408 .Sy ucred_getrgid
1409 .Sy ucred_getruid
1410 .Sy ucred_getsgid
1411 .Sy ucred_getsuid
1412 .Sy ucred_getzoneid
1413 .Sy ucred_size
1414 .Sy ulckpwwdf
1415 .Sy ulimit
1416 .Sy ulltostr
1417 .Sy umask
1418 .Sy umount
1419 .Sy umount2
1420 .Sy uname
1421 .Sy ungetc
1422 .Sy ungetwc
1423 .Sy unlink
1424 .Sy unlinkat
1425 .Sy unlockpt
1426 .Sy unordered
1427 .Sy unsetenv
1428 .Sy updwtmp
1429 .Sy updwtmpx
1430 .Sy uselocale
1431 .Sy usleep
1432 .Sy ustat
1433 .Sy utime
1434 .Sy utimensat
1435 .Sy utimes
1436 .Sy utmpname

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1437 .Sy utmpxname
1438 .Sy uucopy
1439 .Sy valloc
1440 .Sy vasprintf
1441 .Sy verr
1442 .Sy verrx
1443 .Sy vfork
1444 .Sy vforkx
1445 .Sy vfprintf
1446 .Sy vfscanf
1447 .Sy vfwprintf
1448 .Sy vfwscanf
1449 .Sy vhangup
1450 .Sy vlfmt
1451 .Sy vpfmt
1452 .Sy vprintf
1453 .Sy vscanf
1454 .Sy vsnprintf
1455 .Sy vsprintf
1456 .Sy vsscanf
1457 .Sy vswprintf
1458 .Sy vswscanf
1459 .Sy vsyslog
1460 .Sy vwarn
1461 .Sy vwarnx
1462 .Sy vwprintf
1463 .Sy vwscanf
1464 .Sy wait
1465 .Sy wait3
1466 .Sy wait4
1467 .Sy waitid
1468 .Sy waitpid
1469 .Sy walkcontext
1470 .Sy warn
1471 .Sy warnx
1472 .Sy watoll
1473 .Sy wctomb
1474 .Sy wctomb_l
1475 .Sy wcscasecmp
1476 .Sy wcscasecmp_
1477 .Sy wcscat
1478 .Sy wcschr
1479 .Sy wcscmp
1480 .Sy wcscoll
1481 .Sy wcscoll_l
1482 .Sy wcsncpy
1483 .Sy wcscspn
1484 .Sy wsdup
1485 .Sy wcsftime
1486 .Sy wcslen
1487 .Sy wcsncasecmp
1488 .Sy wcsncasecmp_l
1489 .Sy wcsncat
1490 .Sy wcsncmp
1491 .Sy wcsncpy
1492 .Sy wcsnlen
1493 .Sy wcsnrtombs
1494 .Sy wcsnrtombs_l
1495 .Sy wcsprbrk
1496 .Sy wcsrchr
1497 .Sy wcsrtombs
1498 .Sy wcsrtombs_l
1499 .Sy wcssp
1500 .Sy wcsstr
1501 .Sy wcstod
1502 .Sy wcstof

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1503 .Sy wcstoimax
1504 .Sy wcstok
1505 .Sy wcstol
1506 .Sy wcstold
1507 .Sy wcstoll
1508 .Sy wcstombs
1509 .Sy wctombs_l
1510 .Sy wcstoul
1511 .Sy wcstoull
1512 .Sy wcstoumax
1513 .Sy wcs wcs
1514 .Sy wcswidth
1515 .Sy wcswidth_l
1516 .Sy wcsxfrm
1517 .Sy wcsxfrm_l
1518 .Sy wctob
1519 .Sy wctob_l
1520 .Sy wctomb
1521 .Sy wctomb_l
1522 .Sy wctrans
1523 .Sy wctrans_l
1524 .Sy wctype
1525 .Sy wctype_l
1526 .Sy wcwidth
1527 .Sy wcwidth_l
1528 .Sy wmemchr
1529 .Sy wmemcmp
1530 .Sy wmemcpy
1531 .Sy wmemmove
1532 .Sy wmemset
1533 .Sy wordexp
1534 .Sy wordfree
1535 .Sy wprintf
1536 .Sy wracct
1537 .Sy write
1538 .Sy writev
1539 .Sy wscanf
1540 .Sy wscasecmp
1541 .Sy wscat
1542 .Sy wschr
1543 .Sy wscmp
1544 .Sy wscoll
1545 .Sy wscoll
1546 .Sy wcsncpy
1547 .Sy wscspn
1548 .Sy wsdup
1549 .Sy wslen
1550 .Sy wsncasecmp
1551 .Sy wsncat
1552 .Sy wsncmp
1553 .Sy wsncpy
1554 .Sy wspbrk
1555 .Sy wsprintf
1556 .Sy wsrchr
1557 .Sy wsscanf
1558 .Sy wssp
1559 .Sy wstod
1560 .Sy wstok
1561 .Sy wstol
1562 .Sy wstoll
1563 .Sy wstotr
1564 .Sy wsxfrm
1565 .Sy yield
1566 .El
1567 .Lp
18 the multithreading libraries, \fBlibthread\fR and \fBlibpthread\fR.

```

```

19 .SH INTERFACES
20 .sp
21 .LP
22 The shared object \fBlibc.so.1\fR provides the public interfaces defined below.
23 See \fBIntro\fR(3) for additional information on shared object interfaces.
24 .sp

26 .sp
27 .TS
28 1 1
29 1 1 .
30 \fB___loc1\fR \fB___errno\fR
31 \fB___builtin_alloca\fR \fB___ctype\fR
32 \fB___fbufsize\fR \fB___flbf\fR
33 \fB___flt_rounds\fR \fB___fpending\fR
34 \fB___fpurge\fR \fB___freadable\fR
35 \fB___freading\fR \fB___fsetlocking\fR
36 \fB___fwritable\fR \fB___fwriting\fR
37 \fB___huge_val\fR \fB___iob\fR
38 \fB___loc1\fR \fB___major\fR
39 \fB___makedev\fR \fB___mb_cur_max_1\fR
40 \fB___minor\fR
41 \fB___nsw_extended_action\fR \fB___nsw_freeconfig\fR
42 \fB___nsw_getconfig\fR \fB___posix_asctime_r\fR
43 \fB___posix_ctime_r\fR \fB___posix_getgrgid_r\fR
44 \fB___posix_getgrnam_r\fR \fB___posix_getlogin_r\fR
45 \fB___posix_getpwnam_r\fR \fB___posix_getpwuid_r\fR
46 \fB___posix_sigwait\fR \fB___posix_ttyname_r\fR
47 \fB___prioset\fR \fB___priosetset\fR
48 \fB___pthread_cleanup_pop\fR \fB___pthread_cleanup_push\fR
49 \fB___sysconf_xpg5\fR \fB___xpg4\fR
50 \fB___xpg4_putmsg\fR \fB___xpg4_putpmsg\fR
51 \fB___Exit\fR \fB___altzone\fR
52 \fB___assert\fR \fB___cleanup\fR
53 \fB___ctype\fR \fB___daylight\fR
54 \fB___environ\fR \fB___exit\fR
55 \fB___exithandle\fR \fB___filbuf\fR
56 \fB___flsbuf\fR \fB___flushlbf\fR
57 \fB___getdate_err\fR \fB___getdate_err_addr\fR
58 \fB___iob\fR \fB___isnan\fR
59 \fB___isnand\fR \fB___lwp_cond_broadcast\fR
60 \fB___lwp_cond_reltimedwait\fR \fB___lwp_cond_signal\fR
61 \fB___lwp_cond_timedwait\fR \fB___lwp_cond_wait\fR
62 \fB___lwp_continue\fR \fB___lwp_info\fR
63 \fB___lwp_kill\fR \fB___lwp_mutex_lock\fR
64 \fB___lwp_mutex_trylock\fR \fB___lwp_mutex_unlock\fR
65 \fB___lwp_self\fR \fB___lwp_sema_init\fR
66 \fB___lwp_sema_post\fR \fB___lwp_sema_trywait\fR
67 \fB___lwp_sema_wait\fR \fB___lwp_suspend\fR
68 \fB___lwp_suspend2\fR \fB___modf\fR
69 \fB___nextafter\fR \fB___nsc_trydoorcall\fR
70 \fB___nss_XbyY_buf_alloc\fR \fB___nss_XbyY_buf_free\fR
71 \fB___nss_netdb_aliases\fR \fB___numeric\fR
72 \fB___scalb\fR \fB___sibuf\fR
73 \fB___sobuf\fR \fB___stack_grow\fR
74 \fB___sys_buslist\fR \fB___sys_cldlist\fR
75 \fB___sys_fpelist\fR \fB___sys_illlist\fR
76 \fB___sys_segvlst\fR \fB___sys_siginfo_listp\fR
77 \fB___sys_siglist\fR \fB___sys_siglistn\fR
78 \fB___sys_siglistp\fR \fB___sys_traplist\fR
79 \fB___timezone\fR \fB___tolower\fR
80 \fB___toupper\fR \fB___tzname\fR
81 \fB___xftw\fR \fB___fB\fR
82 \fB___Ba64l\fR \fB___Babort\fR
83 \fB___Babs\fR \fB___Baccess\fR
84 \fB___Bacct\fR \fB___Bacl\fR

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85 \fB___Baddrtostr\fR \fB___Baddsev\fR
86 \fB___Baddseverity\fR \fB___Badjtime\fR
87 \fB___Baio_cancel\fR \fB___Baio_error\fR
88 \fB___Baio_fsync\fR \fB___Baio_read\fR
89 \fB___Baio_return\fR \fB___Baio_suspend\fR
90 \fB___Baio_waitn\fR \fB___Baio_write\fR
91 \fB___Baio_cancel\fR \fB___Baio_read\fR
92 \fB___Baio_waitn\fR \fB___Baio_write\fR
93 \fB___Balarm\fR \fB___Balphasort\fR
94 \fB___Baltzone\fR \fB___Bascftime\fR
95 \fB___Basctime\fR \fB___Basctime_r\fR
96 \fB___Basprintf\fR
97 \fB___Batexit\fR \fB___Batof\fR
98 \fB___Batoi\fR \fB___Batoi_l\fR
99 \fB___Batoll\fR \fB___Batomic_add_16\fR
100 \fB___Batomic_add_16_nv\fR \fB___Batomic_add_32\fR
101 \fB___Batomic_add_32_nv\fR \fB___Batomic_add_64\fR
102 \fB___Batomic_add_64_nv\fR \fB___Batomic_add_8\fR
103 \fB___Batomic_add_8_nv\fR \fB___Batomic_add_char\fR
104 \fB___Batomic_add_char_nv\fR \fB___Batomic_add_int\fR
105 \fB___Batomic_add_int_nv\fR \fB___Batomic_add_long\fR
106 \fB___Batomic_add_long_nv\fR \fB___Batomic_add_ptr\fR
107 \fB___Batomic_add_ptr_nv\fR \fB___Batomic_add_short\fR
108 \fB___Batomic_add_short_nv\fR \fB___Batomic_and_16\fR
109 \fB___Batomic_and_16_nv\fR \fB___Batomic_and_32\fR
110 \fB___Batomic_and_32_nv\fR \fB___Batomic_and_64\fR
111 \fB___Batomic_and_64_nv\fR \fB___Batomic_and_8\fR
112 \fB___Batomic_and_8_nv\fR \fB___Batomic_and_uchar\fR
113 \fB___Batomic_and_uchar_nv\fR \fB___Batomic_and_uint\fR
114 \fB___Batomic_and_uint_nv\fR \fB___Batomic_and_ulong\fR
115 \fB___Batomic_and_ulong_nv\fR \fB___Batomic_and_ushort\fR
116 \fB___Batomic_and_ushort_nv\fR \fB___Batomic_cas_16\fR
117 \fB___Batomic_cas_32\fR \fB___Batomic_cas_64\fR
118 \fB___Batomic_cas_8\fR \fB___Batomic_cas_ptr\fR
119 \fB___Batomic_cas_uchar\fR \fB___Batomic_cas_uint\fR
120 \fB___Batomic_cas_ulong\fR \fB___Batomic_cas_ushort\fR
121 \fB___Batomic_clear_long_excl\fR \fB___Batomic_dec_16\fR
122 \fB___Batomic_dec_16_nv\fR \fB___Batomic_dec_32\fR
123 \fB___Batomic_dec_32_nv\fR \fB___Batomic_dec_64\fR
124 \fB___Batomic_dec_64_nv\fR \fB___Batomic_dec_8\fR
125 \fB___Batomic_dec_8_nv\fR \fB___Batomic_dec_ptr\fR
126 \fB___Batomic_dec_ptr_nv\fR \fB___Batomic_dec_uchar\fR
127 \fB___Batomic_dec_uchar_nv\fR \fB___Batomic_dec_uint\fR
128 \fB___Batomic_dec_uint_nv\fR \fB___Batomic_dec_ulong\fR
129 \fB___Batomic_dec_ulong_nv\fR \fB___Batomic_dec_ushort\fR
130 \fB___Batomic_dec_ushort_nv\fR \fB___Batomic_inc_16\fR
131 \fB___Batomic_inc_16_nv\fR \fB___Batomic_inc_32\fR
132 \fB___Batomic_inc_32_nv\fR \fB___Batomic_inc_64\fR
133 \fB___Batomic_inc_64_nv\fR \fB___Batomic_inc_8\fR
134 \fB___Batomic_inc_8_nv\fR \fB___Batomic_inc_ptr\fR
135 \fB___Batomic_inc_ptr_nv\fR \fB___Batomic_inc_uchar\fR
136 \fB___Batomic_inc_uchar_nv\fR \fB___Batomic_inc_uint\fR
137 \fB___Batomic_inc_uint_nv\fR \fB___Batomic_inc_ulong\fR
138 \fB___Batomic_inc_ulong_nv\fR \fB___Batomic_inc_ushort\fR
139 \fB___Batomic_inc_ushort_nv\fR \fB___Batomic_or_16\fR
140 \fB___Batomic_or_16_nv\fR \fB___Batomic_or_32\fR
141 \fB___Batomic_or_32_nv\fR \fB___Batomic_or_64\fR
142 \fB___Batomic_or_64_nv\fR \fB___Batomic_or_8\fR
143 \fB___Batomic_or_8_nv\fR \fB___Batomic_or_uchar\fR
144 \fB___Batomic_or_uchar_nv\fR \fB___Batomic_or_uint\fR
145 \fB___Batomic_or_uint_nv\fR \fB___Batomic_or_ulong\fR
146 \fB___Batomic_or_ulong_nv\fR \fB___Batomic_or_ushort\fR
147 \fB___Batomic_or_ushort_nv\fR \fB___Batomic_set_long_excl\fR
148 \fB___Batomic_swap_16\fR \fB___Batomic_swap_32\fR
149 \fB___Batomic_swap_64\fR \fB___Batomic_swap_8\fR
150 \fB___Batomic_swap_ptr\fR \fB___Batomic_swap_uchar\fR

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151 \fBatomic_swap_uint\fr \fBatomic_swap_ulong\fr
152 \fBatomic_swap_ushort\fr \fBattropen\fr
153 \fBbacktrace\fr \fBbacktrace_symbols\fr
154 \fBbacktrace_symbols_fd\fr \fBbasename\fr
155 \fBbcmp\fr \fBbcopy\fr
156 \fBbindtextdomain\fr \fBbind_textdomain_codeset\fr
157 \fBbrk\fr \fBbsd_signal\fr
158 \fBbsearch\fr
159 \fBbtowc\fr \fBbtowc_l\fr
160 \fBbzero\fr \fBcalloc\fr
161 \fBcatclose\fr \fBcatgets\fr
162 \fBcatopen\fr \fBcfgetispeed\fr
163 \fBcfgetospeed\fr \fBcfsetispeed\fr
164 \fBcfsetospeed\fr \fBcftime\fr
165 \fBchdir\fr \fBchmod\fr
166 \fBchown\fr \fBchroot\fr
167 \fBclearerr\fr \fBclock\fr
168 \fBclock_getres\fr \fBclock_gettime\fr
169 \fBclock_nanosleep\fr \fBclock_settime\fr
170 \fBclose\fr \fBclosedir\fr
171 \fBclosefrom\fr \fBcloselog\fr
172 \fBcond_broadcast\fr \fBcond_destroy\fr
173 \fBcond_init\fr \fBcond_reltimedwait\fr
174 \fBcond_signal\fr \fBcond_timedwait\fr
175 \fBcond_wait\fr \fBconfstr\fr
176 \fBcreat\fr \fBcrypt\fr
177 \fBcrypt_genhash_impl\fr \fBcrypt_gensalt\fr
178 \fBcrypt_gensalt_impl\fr \fBcsetcol\fr
179 \fBcsetlen\fr \fBctermid\fr
180 \fBctermid_r\fr \fBctime\fr
181 \fBctime_r\fr \fBcuserid\fr
182 \fBdaemon\fr
183 \fBdaylight\fr \fBdbm_clearerr\fr
184 \fBdbm_close\fr \fBdbm_delete\fr
185 \fBdbm_error\fr \fBdbm_fetch\fr
186 \fBdbm_firstkey\fr \fBdbm_nextkey\fr
187 \fBdbm_open\fr \fBdbm_store\fr
188 \fBdcgettext\fr \fBdcngettext\fr
189 \fBdecimal_to_double\fr \fBdecimal_to_extended\fr
190 \fBdecimal_to_quadruple\fr \fBdecimal_to_single\fr
191 \fBdgettext\fr \fBdifftime\fr
192 \fBdirectio\fr \fBdirfd\fr
193 \fBdirname\fr \fBdiv\fr
194 \fBdladdr\fr \fBdladdr1\fr
195 \fBdlclose\fr \fBdlclose\fr
196 \fBdlerror\fr \fBdlinfo\fr
197 \fBdlmopen\fr \fBdllopen\fr
198 \fBdlsym\fr \fBdngettext\fr
199 \fBdoor_bind\fr \fBdoor_call\fr
200 \fBdoor_create\fr \fBdoor_cred\fr
201 \fBdoor_getparam\fr \fBdoor_info\fr
202 \fBdoor_return\fr \fBdoor_revoke\fr
203 \fBdoor_server_create\fr \fBdoor_setparam\fr
204 \fBdoor_ucred\fr \fBdoor_unbind\fr
205 \fBdouble_to_decimal\fr \fBdrand48\fr
206 \fBdup\fr \fBdup2\fr
207 \fBduplocale\fr
208 \fBconvert\fr \fBecvt\fr
209 \fBenable_extended_FILE_stdio\fr
210 \fBencrypt\fr \fBendgrent\fr
211 \fBendnetgrent\fr \fBendpwent\fr
212 \fBendspent\fr \fBendusershell\fr
213 \fBendutent\fr \fBendutxent\fr
214 \fBenvIRON\fr \fBerand48\fr
215 \fBerr\fr \fBerrno\fr
216 \fBerrx\fr \fBeucol\fr

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217 \fBeuclen\fr \fBeucscoll\fr
218 \fBexec1\fr \fBexecle\fr
219 \fBexeclp\fr \fBexecv\fr
220 \fBexecve\fr \fBexecvp\fr
221 \fBexit\fr \fBextended_to_decimal\fr
222 \fBfaccessat\fr
223 \fBfac1\fr \fBfattach\fr
224 \fBfchdir\fr \fBfchmod\fr
225 \fBfchown\fr \fBfchownat\fr
226 \fBfchroot\fr \fBfclose\fr
227 \fBfcntl\fr \fBfconvert\fr
228 \fBfcvt\fr \fBfdatasync\fr
229 \fBfdetach\fr
230 \fBfdopen\fr \fBfdopendir\fr
231 \fBfdwalk\fr \fBfeof\fr
232 \fBferror\fr \fBfflush\fr
233 \fBffs\fr \fBfgetattr\fr
234 \fBfgetc\fr
235 \fBfgetgrent\fr \fBfgetgrent_r\fr
236 \fBfgetpos\fr \fBfgetpwent\fr
237 \fBfgetpwent_r\fr \fBfgets\fr
238 \fBfgetspent\fr \fBfgetspent_r\fr
239 \fBfgetwc\fr \fBfgetwc_l\fr
240 \fBfgetws\fr
241 \fBfile_to_decimal\fr \fBfileno\fr
242 \fBfinite\fr \fBflockfile\fr
243 \fBfmtmsg\fr \fBfnmatch\fr
244 \fBfopen\fr \fBfork\fr
245 \fBfork1\fr \fBforkall\fr
246 \fBforkallx\fr \fBforkx\fr
247 \fBfpathconf\fr \fBfpclass\fr
248 \fBfpgetmask\fr \fBfpgetround\fr
249 \fBfpgetsticky\fr \fBfprintf\fr
250 \fBfpsetmask\fr \fBfpsetround\fr
251 \fBfpsetsticky\fr \fBfputc\fr
252 \fBfputs\fr \fBfputwc\fr
253 \fBfputws\fr \fBfread\fr
254 \fBfree\fr \fBfreelocale\fr
255 \fBfreopen\fr
256 \fBfrexp\fr \fBfscanf\fr
257 \fBfseek\fr \fBfseeko\fr
258 \fBfsetattr\fr
259 \fBfsetpos\fr \fBfstat\fr
260 \fBfstatat\fr \fBfstatfs\fr
261 \fBfstatvfs\fr \fBfsync\fr
262 \fBftell\fr \fBftello\fr
263 \fBftime\fr \fBftok\fr
264 \fBftruncate\fr \fBftrylockfile\fr
265 \fBftw\fr \fBfunc_to_decimal\fr
266 \fBfunlockfile\fr \fBfutimens\fr
267 \fBfutimesat\fr
268 \fBfwide\fr \fBfwprintf\fr
269 \fBfwrite\fr \fBfwscanf\fr
270 \fBgconvert\fr \fBgcv\fr
271 \fBgetacct\fr \fBgetattrat\fr
272 \fBgetc\fr
273 \fBgetc_unlocked\fr \fBgetchar\fr
274 \fBgetchar_unlocked\fr \fBgetcontext\fr
275 \fBgetcuid\fr \fBgetcwd\fr
276 \fBgetdate\fr \fBgetdate_err\fr
277 \fBgetdents\fr \fBgetdtablesize\fr
278 \fBgetegid\fr \fBgetenv\fr
279 \fBgeteuid\fr \fBgetexecname\fr
280 \fBgetextmntent\fr \fBgetgid\fr
281 \fBgetgrent\fr \fBgetgrent_r\fr
282 \fBgetgrgid\fr \fBgetgrgid_r\fr

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283 \fBgetgrnam\fR \fBgetgrnam_r\fR
284 \fBgetgroups\fR \fBgethome\group\fR
285 \fBgethostid\fR \fBgethostname\fR
286 \fBgethrtime\fR \fBgethrvtime\fR
287 \fBgetisax\fR \fBgetitimer\fR
288 \fBgetloadavg\fR \fBgetlogin\fR
289 \fBgetlogin_r\fR \fBgetmntany\fR
290 \fBgetmntent\fR \fBgetmsg\fR
291 \fBgetnetgrent\fR \fBgetnetgrent_r\fR
292 \fBgetopt\fR \fBgetopt_clip\fR
293 \fBgetopt_long\fR \fBgetopt_long_only\fR
294 \fBgetpagesize\fR \fBgetpagesizes\fR
295 \fBgetpass\fR \fBgetpassphrase\fR
296 \fBgetpeercred\fR \fBgetpflags\fR
297 \fBgetpgid\fR \fBgetpgrp\fR
298 \fBgetpid\fR \fBgetpmsg\fR
299 \fBgetppid\fR \fBgetppriv\fR
300 \fBgetpriority\fR \fBgetprojid\fR
301 \fBgetpw\fR \fBgetpwent\fR
302 \fBgetpwent_r\fR \fBgetpwnam\fR
303 \fBgetpwnam_r\fR \fBgetpwuid\fR
304 \fBgetpwuid_r\fR \fBgetrctl\fR
305 \fBgetrlimit\fR \fBgetrusage\fR
306 \fBgets\fR \fBgetsid\fR
307 \fBgetspent\fR \fBgetspent_r\fR
308 \fBgetspnam\fR \fBgetspnam_r\fR
309 \fBgetsubopt\fR \fBgettaskid\fR
310 \fBgettext\fR \fBgettimeofday\fR
311 \fBgettxt\fR \fBgetuid\fR
312 \fBgetusershell\fR \fBgetustack\fR
313 \fBgetutent\fR \fBgetutid\fR
314 \fBgetutline\fR \fBgetutmp\fR
315 \fBgetutmpx\fR \fBgetutxent\fR
316 \fBgetutxid\fR \fBgetutxline\fR
317 \fBgetvfsany\fR \fBgetvfsent\fR
318 \fBgetvfsfile\fR \fBgetvfsspec\fR
319 \fBgetw\fR
320 \fBgetwc\fR \fBgetwc_l\fR
321 \fBgetwchar\fR \fBgetwchar_l\fR
322 \fBgetwd\fR
323 \fBgetwidth\fR \fBgetws\fR
324 \fBgetzoneid\fR \fBgetzoneidbyname\fR
325 \fBgetzonenamebyid\fR \fBglob\fR
326 \fBglobfree\fR \fBgmtime\fR
327 \fBgmtime_r\fR \fBgrantpt\fR
328 \fBgsignal\fR \fBhasmntopt\fR
329 \fBhcreate\fR \fBhdestroy\fR
330 \fBhsearch\fR \fBiconv\fR
331 \fBiconv_close\fR \fBiconv_open\fR
332 \fBimaxabs\fR \fBimaxdiv\fR
333 \fBindex\fR \fBinitgroups\fR
334 \fBinitstate\fR \fBinnnetgr\fR
335 \fBinsque\fR \fBioctl\fR
336 \fBis_system_labeled\fR
337 \fBisaexec\fR
338 \fBisalnum\fR \fBisalnum_l\fR
339 \fBisalpha\fR \fBisalpha_l\fR
340 \fBisascii\fR \fBisastream\fR
341 \fBisatty\fR
342 \fBisblank\fR \fBisblank_l\fR
343 \fBiscntrl\fR \fBiscntrl_l\fR
344 \fBisdigit\fR \fBisdigit_l\fR
345 \fBisenglish\fR
346 \fBisgraph\fR \fBisgraph_l\fR
347 \fBisideogram\fR
348 \fBislower\fR \fBislower_l\fR

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349 \fBisnan\fR
350 \fBisnand\fR \fBisnanf\fR
351 \fBisnumber\fR \fBisphonogram\fR
352 \fBisprint\fR \fBisprint_l\fR
353 \fBispunct\fR \fBispunct_l\fR
354 \fBissetugid\fR
355 \fBisspace\fR \fBisspace_l\fR
356 \fBisspecial\fR
357 \fBisupper\fR \fBisupper_l\fR
358 \fBiswalnum\fR \fBiswalnum_l\fR
359 \fBiswalpha\fR \fBiswalpha_l\fR
360 \fBiswblank\fR \fBiswblank_l\fR
361 \fBiswcntrl\fR \fBiswcntrl_l\fR
362 \fBiswctype\fR \fBiswctype_l\fR
363 \fBiswdigit\fR \fBiswdigit_l\fR
364 \fBiswideogram\fR \fBiswideogram_l\fR
365 \fBiswgraph\fR \fBiswgraph_l\fR
366 \fBiswhexnumber\fR \fBiswhexnumber_l\fR
367 \fBiswlower\fR \fBiswlower_l\fR
368 \fBiswnumber\fR \fBiswnumber_l\fR
369 \fBiswphonogram\fR \fBiswphonogram_l\fR
370 \fBiswprint\fR \fBiswprint_l\fR
371 \fBiswpunct\fR \fBiswpunct_l\fR
372 \fBiswspace\fR \fBiswspace_l\fR
373 \fBiswspecial\fR \fBiswspecial_l\fR
374 \fBiswupper\fR \fBiswupper_l\fR
375 \fBiswxdigit\fR \fBiswxdigit_l\fR
376 \fBisxdigit\fR \fBisxdigit_l\fR
377 \fBjrand48\fR \fBkill\fR
378 \fBkillpg\fR \fBkill_64a\fR
379 \fBlabs\fR \fBladd\fR
380 \fBlchown\fR \fBlckpwnfd\fR
381 \fBlcong48\fR \fBldexpf\fR
382 \fBldivide\fR \fBlexp10\fR
383 \fBlfind\fR \fBlfmt\fR
384 \fBlink\fR \fBlislistio\fR
385 \fBlldiv\fR
386 \fBlldiv_l\fR \fBlldiv_l_l\fR
387 \fBlseek\fR \fBltostr\fR
388 \fBlocaleconv\fR \fBlocaltime\fR
389 \fBlocaltime_r\fR \fBlocaltime_r_l\fR
390 \fBilogb\fR \fBlone\fR
391 \fBlongjmp\fR \fBlrand48\fR
392 \fBlsearch\fR \fBlseek_l\fR
393 \fBlshiftl\fR \fBlstat_l\fR
394 \fBlsub_l\fR \fBlten_l\fR
395 \fBlzero_l\fR \fBmadvice_l\fR
396 \fBmakecontext_l\fR \fBmakeutx_l\fR
397 \fBmalloc_l\fR
398 \fBmbilen_l\fR \fBmbilen_l_l\fR
399 \fBmbrlen_l\fR \fBmbrlen_l_l\fR
400 \fBmbrtowc_l\fR \fBmbrtowc_l_l\fR
401 \fBmbsinit_l\fR \fBmbsinit_l_l\fR
402 \fBmbsnrtowcs_l\fR \fBmbsnrtowcs_l_l\fR
403 \fBmbsrtowcs_l\fR \fBmbsrtowcs_l_l\fR
404 \fBmbstowcs_l\fR \fBmbstowcs_l_l\fR
405 \fBmbtowc_l\fR \fBmbtowc_l_l\fR
406 \fBmemalign_l\fR \fBmembar_consumer_l\fR
407 \fBmembar_enter_l\fR \fBmembar_exit_l\fR
408 \fBmembar_producer_l\fR \fBmemccpy_l\fR
409 \fBmemchr_l\fR \fBmemcmp_l\fR
410 \fBmemcntl_l\fR \fBmemcpy_l\fR
411 \fBmeminfo_l\fR \fBmemmove_l\fR
412 \fBmemset_l\fR \fBmincore_l\fR
413 \fBmkdir_l\fR \fBmkfifo_l\fR
414 \fBmknod_l\fR \fBmkstemp_l\fR

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415 \fBmktemp\fR      \fBmktime\fR
416 \fBmlock\fR        \fBmlockall\fR
417 \fBmmap\fR          \fBmmapobj\fR
418 \fBmodctl\fR        \fBmodctl\fR
419 \fBmodf\fR          \fBmodff\fR
420 \fBmodutx\fR        \fBmonitor\fR
421 \fBmount\fR          \fBmprotect\fR
422 \fBmq_close\fR       \fBmq_getattr\fR
423 \fBmq_notify\fR      \fBmq_open\fR
424 \fBmq_receive\fR      \fBmq_reltimedreceive_np\fR
425 \fBmq_reltimedsend_np\fR \fBmq_send\fR
426 \fBmq_setattr\fR      \fBmq_timedreceive\fR
427 \fBmq_timedsend\fR    \fBmq_unlink\fR
428 \fBmrand48\fR        \fBmsgctl\fR
429 \fBmsgget\fR         \fBmsgids\fR
430 \fBmsgrcv\fR         \fBmsgsnap\fR
431 \fBmsgsnd\fR         \fBmsync\fR
432 \fBmunlock\fR        \fBmunlockall\fR
433 \fBmunmap\fR         \fBmutex_consistent\fR
434 \fBmutex_destroy\fR   \fBmutex_init\fR
435 \fBmutex_lock\fR      \fBmutex_trylock\fR
436 \fBmutex_unlock\fR   \fBnanosleep\fR
437 \fBnextafter\fR      \fBnewlocale\fR
438 \fBnfs_getfh\fR      \fBnftw\fR
439 \fBngettext\fR        \fBnice\fR
440 \fBnln_langinfo\fR    \fBnln_langinfo_l\fR
441 \fBnrand48\fR
442 \fBnss_default_finders\fR \fBnss_delete\fR
443 \fBnss_endent\fR      \fBnss_getent\fR
444 \fBnss_search\fR      \fBnss_setent\fR
445 \fBntp_adjtime\fR     \fBntp_gettime\fR
446 \fBopen\fR           \fBopenat\fR
447 \fBopendir\fR        \fBopenlog\fR
448 \fBoptarg\fR         \fBopterr\fR
449 \fBoptind\fR         \fBoptopt\fR
450 \fBp_online\fR       \fBpathconf\fR
451 \fBpause\fR          \fBpclose\fR
452 \fBpcsample\fR       \fBperror\fR
453 \fBpfmt\fR           \fBpipe\fR
454 \fBplock\fR          \fBpoll\fR
455 \fBpopen\fR          \fBport_alert\fR
456 \fBport_associate\fR \fBport_create\fR
457 \fBport_dissociate\fR \fBport_get\fR
458 \fBport_getn\fR      \fBport_send\fR
459 \fBport_sendn\fR     \fBposix_fadvise\fR
460 \fBposix_fallocate\fR \fBposix_madvise\fR
461 \fBposix_memalign\fR \fBposix_openpt\fR
462 \fBposix_spawn\fR    \fBposix_spawn_file_actions_addclose\fR
463 \fBposix_spawn_file_actions_addclosefrom_np\fR \fBposix_spawn_file_actions_addd
464 \fBposix_spawn_file_actions_addopen\fR
465 \fBposix_spawn_file_actions_destroy\fR
466 \fBposix_spawn_file_actions_init\fR
467 \fBposix_spawn_pipe_np\fR
468 \fBposix_spawnattr_destroy\fR
469 \fBposix_spawnattr_getflags\fR \fBposix_spawnattr_getpgroup\fR
470 \fBposix_spawnattr_getschedparam\fR \fBposix_spawnattr_getschedpolicy\fR
471 \fBposix_spawnattr_getsigdefault\fR \fBposix_spawnattr_getsigignore_np\fR
472 \fBposix_spawnattr_getsigmask\fR \fBposix_spawnattr_init\fR
473 \fBposix_spawnattr_setflags\fR \fBposix_spawnattr_setpgroup\fR
474 \fBposix_spawnattr_setschedparam\fR \fBposix_spawnattr_setschedpolicy\fR
475 \fBposix_spawnattr_setsigdefault\fR \fBposix_spawnattr_setsigignore_np\fR
476 \fBposix_spawnattr_setsigmask\fR \fBposix_spawnnp\fR
477 \fBpread\fR          \fBprintf\fR
478 \fBprintstack\fR     \fBpriocntl\fR
479 \fBpriocntlset\fR    \fBpriv_addset\fR
480 \fBpriv_allocset\fR \fBpriv_copyset\fR

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481 \fBpriv_delset\fR    \fBpriv_emptyset\fR
482 \fBpriv_fillset\fR   \fBpriv_freeset\fR
483 \fBpriv_getbyname\fR \fBpriv_getbynum\fR
484 \fBpriv_getsetbyname\fR \fBpriv_getsetbynum\fR
485 \fBpriv_gettext\fR    \fBpriv_ineffect\fR
486 \fBpriv_intersect\fR \fBpriv_inverse\fR
487 \fBpriv_isemptyset\fR \fBpriv_isequalset\fR
488 \fBpriv_isfullset\fR \fBpriv_ismember\fR
489 \fBpriv_issubset\fR  \fBpriv_set\fR
490 \fBpriv_set_to_str\fR \fBpriv_str_to_set\fR
491 \fBpriv_union\fR     \fBprocessor_bind\fR
492 \fBprocessor_info\fR  \fBprofil\fR
493 \fBpselect\fR        \fBpset_assign\fR
494 \fBpset_bind\fR      \fBpset_create\fR
495 \fBpset_destroy\fR    \fBpset_getattr\fR
496 \fBpset_getloadavg\fR \fBpset_info\fR
497 \fBpset_list\fR       \fBpset_setattr\fR
498 \fBpsiginfo\fR       \fBpsignal\fR
499 \fBpthread_atfork\fR \fBpthread_attr_destroy\fR
500 \fBpthread_attr_getdetachstate\fR \fBpthread_attr_getguardsize\fR
501 \fBpthread_attr_getinheritsched\fR \fBpthread_attr_getschedparam\fR
502 \fBpthread_attr_getschedpolicy\fR \fBpthread_attr_getscope\fR
503 \fBpthread_attr_getstack\fR \fBpthread_attr_getstackaddr\fR
504 \fBpthread_attr_getstacksize\fR \fBpthread_attr_init\fR
505 \fBpthread_attr_setdetachstate\fR \fBpthread_attr_setguardsize\fR
506 \fBpthread_attr_setinheritsched\fR \fBpthread_attr_setschedparam\fR
507 \fBpthread_attr_setschedpolicy\fR \fBpthread_attr_setscope\fR
508 \fBpthread_attr_setstack\fR \fBpthread_attr_setstackaddr\fR
509 \fBpthread_attr_setstacksize\fR \fBpthread_barrier_destroy\fR
510 \fBpthread_barrier_init\fR \fBpthread_barrier_wait\fR
511 \fBpthread_barrierattr_destroy\fR \fBpthread_barrierattr_getpshared\fR
512 \fBpthread_barrierattr_init\fR \fBpthread_barrierattr_setpshared\fR
513 \fBpthread_cancel\fR \fBpthread_cond_broadcast\fR
514 \fBpthread_cond_destroy\fR \fBpthread_cond_init\fR
515 \fBpthread_cond_reltimedwait_np\fR \fBpthread_cond_signal\fR
516 \fBpthread_cond_timedwait\fR \fBpthread_cond_wait\fR
517 \fBpthread_condattr_destroy\fR \fBpthread_condattr_getclock\fR
518 \fBpthread_condattr_getpshared\fR \fBpthread_condattr_init\fR
519 \fBpthread_condattr_setclock\fR \fBpthread_condattr_setpshared\fR
520 \fBpthread_create\fR \fBpthread_detach\fR
521 \fBpthread_equal\fR \fBpthread_exit\fR
522 \fBpthread_getconcurrency\fR \fBpthread_getschedparam\fR
523 \fBpthread_getspecific\fR \fBpthread_join\fR
524 \fBpthread_key_create\fR \fBpthread_key_create_once_np\fR
525 \fBpthread_key_delete\fR
526 \fBpthread_kill\fR \fBpthread_mutex_consistent\fR
527 \fBpthread_mutex_destroy\fR \fBpthread_mutex_getprioceiling\fR
528 \fBpthread_mutex_init\fR \fBpthread_mutex_lock\fR
529 \fBpthread_mutex_reltimedlock_np\fR \fBpthread_mutex_setprioceiling\fR
530 \fBpthread_mutex_timedlock\fR \fBpthread_mutex_trylock\fR
531 \fBpthread_mutex_unlock\fR \fBpthread_mutexattr_destroy\fR
532 \fBpthread_mutexattr_getprioceiling\fR \fBpthread_mutexattr_getprotocol\fR
533 \fBpthread_mutexattr_getpshared\fR \fBpthread_mutexattr_getrobust\fR
534 \fBpthread_mutexattr_gettype\fR \fBpthread_mutexattr_init\fR
535 \fBpthread_mutexattr_setprioceiling\fR \fBpthread_mutexattr_setprotocol\fR
536 \fBpthread_mutexattr_setpshared\fR \fBpthread_mutexattr_setrobust\fR
537 \fBpthread_mutexattr_settype\fR \fBpthread_once\fR
538 \fBpthread_rwlock_destroy\fR \fBpthread_rwlock_init\fR
539 \fBpthread_rwlock_rdlock\fR \fBpthread_rwlock_reltimedrdlock_np\fR
540 \fBpthread_rwlock_timedwrlock\fR \fBpthread_rwlock_timedrdlock\fR
541 \fBpthread_rwlock_timedwrlock\fR \fBpthread_rwlock_tryrdlock\fR
542 \fBpthread_rwlock_trywrlock\fR \fBpthread_rwlock_unlock\fR
543 \fBpthread_rwlock_wrlock\fR \fBpthread_rwlockattr_destroy\fR
544 \fBpthread_rwlockattr_getpshared\fR \fBpthread_rwlockattr_init\fR
545 \fBpthread_rwlockattr_getpshared\fR \fBpthread_self\fR
546 \fBpthread_setcancelstate\fR \fBpthread_setcanceltype\fR

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547 \fBpthread_setconcurrency\fR \fBpthread_setspecific\fR
548 \fBpthread_sigmask\fR \fBpthread_setschedparam\fR
549 \fBpthread_setschedprio\fR \fBpthread_spin_destroy\fR
550 \fBpthread_spin_init\fR \fBpthread_spin_lock\fR
551 \fBpthread_spin_trylock\fR \fBpthread_spin_unlock\fR
552 \fBpthread_testcancel\fR \fBpthreadsname\fR
553 \fBputacct\fR \fBputc\fR
554 \fBputc_unlocked\fR \fBputchar\fR
555 \fBputchar_unlocked\fR \fBputenv\fR
556 \fBputmsg\fR \fBputpmsg\fR
557 \fBputpwent\fR \fBputs\fR
558 \fBputspent\fR \fBpututline\fR
559 \fBpututxline\fR \fBputw\fR
560 \fBputwc\fR \fBputwchar\fR
561 \fBputws\fR \fBpwrite\fR
562 \fBqecconvert\fR \fBqecvt\fR
563 \fBqfconvert\fR \fBqfcvt\fR
564 \fBqgconvert\fR \fBqgcvt\fR
565 \fBqsort\fR \fBquaduple_to_decimal\fR
566 \fBraise\fR \fBrand\fR
567 \fBrand_r\fR \fBrandom\fR
568 \fBrcctl_walk\fR \fBrcctlblk_get_enforced_value\fR
569 \fBrcctlblk_get_firing_time\fR \fBrcctlblk_get_global_action\fR
570 \fBrcctlblk_get_global_flags\fR \fBrcctlblk_get_local_action\fR
571 \fBrcctlblk_get_local_flags\fR \fBrcctlblk_get_privilege\fR
572 \fBrcctlblk_get_recipient_pid\fR \fBrcctlblk_get_value\fR
573 \fBrcctlblk_set_local_action\fR \fBrcctlblk_set_local_flags\fR
574 \fBrcctlblk_set_privilege\fR \fBrcctlblk_set_recipient_pid\fR
575 \fBrcctlblk_set_value\fR \fBrcctlblk_size\fR
576 \fBre_comp\fR \fBre_exec\fR
577 \fBread\fR \fBreaddir\fR
578 \fBreaddir_r\fR \fBreadlink\fR
579 \fBreadv\fR \fBrealloc\fR
580 \fBrealpath\fR \fBrebboot\fR
581 \fBregcmp\fR \fBregcomp\fR
582 \fBregerror\fR \fBregex\fR
583 \fBregexec\fR \fBregfree\fR
584 \fBremove\fR \fBremque\fR
585 \fBrename\fR \fBrenameat\fR
586 \fBresetmnttab\fR \fBresolvepath\fR
587 \fBrewind\fR \fBrewinddir\fR
588 \fBbrindex\fR \fBbrmdir\fR
589 \fBbrw_rdlock\fR \fBbrw_read_held\fR
590 \fBbrw_tryrdlock\fR \fBbrw_trywrlock\fR
591 \fBbrw_unlock\fR \fBbrw_write_held\fR
592 \fBbrw_wrlock\fR \fBbrwlock_destroy\fR
593 \fBbrwlock_init\fR \fBbsbrk\fR
594 \fBscalb\fR \fBscandir\fR
595 \fBscanf\fR \fBsched_get_priority_max\fR
596 \fBsched_get_priority_min\fR \fBsched_getparam\fR
597 \fBsched_getscheduler\fR \fBsched_rr_get_interval\fR
598 \fBsched_setparam\fR \fBsched_setscheduler\fR
599 \fBsched_yield\fR \fBschedctl_exit\fR
600 \fBschedctl_init\fR \fBschedctl_lookup\fR
601 \fBschedctl_start\fR \fBschedctl_stop\fR
602 \fBseconvert\fR \fBseed48\fR
603 \fBseekdir\fR \fBselect\fR
604 \fBsem_close\fR \fBsem_destroy\fR
605 \fBsem_getvalue\fR \fBsem_init\fR
606 \fBsem_open\fR \fBsem_post\fR
607 \fBsem_reltimewait_np\fR \fBsem_timedwait\fR
608 \fBsem_trywait\fR \fBsem_unlink\fR
609 \fBsem_wait\fR
610 \fBsema_destroy\fR \fBsema_held\fR
611 \fBsema_init\fR \fBsema_post\fR
612 \fBsema_trywait\fR \fBsema_wait\fR

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613 \fBsemctl\fR \fBsemget\fR
614 \fBsemids\fR \fBsemop\fR
615 \fBsemtimedop\fR \fBsetattrat\fR
616 \fBsetbuf\fR
617 \fBsetbuffer\fR \fBsetcat\fR
618 \fBsetcontext\fR \fBsetegid\fR
619 \fBsetenv\fR \fBseteuid\fR
620 \fBsetgid\fR \fBsetgrent\fR
621 \fBsetgroups\fR \fBsethostname\fR
622 \fBsetitimer\fR \fBsetjmp\fR
623 \fBsetkey\fR \fBsetlabel\fR
624 \fBsetlinebuf\fR \fBsetlocale\fR
625 \fBsetlogmask\fR \fBsetnetgrent\fR
626 \fBsetpflags\fR \fBsetpgid\fR
627 \fBsetpgrp\fR \fBsetppriv\fR
628 \fBsetpriority\fR \fBsetpwent\fR
629 \fBsetrctl\fR \fBsetregid\fR
630 \fBsetreuid\fR \fBsetrlimit\fR
631 \fBsetsid\fR \fBsetspent\fR
632 \fBsetstate\fR \fBsettaskid\fR
633 \fBsettimeofday\fR \fBsetuid\fR
634 \fBsetusershell\fR \fBsetustack\fR
635 \fBsetutent\fR \fBsetutxent\fR
636 \fBsetvbuf\fR \fBsfconvert\fR
637 \fBsgconvert\fR \fBshm_open\fR
638 \fBshm_unlink\fR \fBshmatt\fR
639 \fBshmctl\fR \fBshmdt\fR
640 \fBshmget\fR \fBshmid\fR
641 \fBsig2str\fR \fBsigaction\fR
642 \fBsigaddset\fR \fBsigaltstack\fR
643 \fBsigdelset\fR \fBsigemptyset\fR
644 \fBsigfillset\fR \fBsigfpe\fR
645 \fBsighold\fR \fBsigignore\fR
646 \fBsiginterrupt\fR \fBsigismember\fR
647 \fBsiglongjmp\fR \fBsignal\fR
648 \fBsigpause\fR \fBsigpending\fR
649 \fBsigprocmask\fR \fBsigqueue\fR
650 \fBsigrelse\fR
651 \fBsigsend\fR \fBsigsendset\fR
652 \fBsigset\fR \fBsigsetjmp\fR
653 \fBsigstack\fR \fBsigsuspend\fR
654 \fBsigtimedwait\fR \fBsigwait\fR
655 \fBsigwaitinfo\fR \fBsingle_to_decimal\fR
656 \fBsleap\fR \fBsnprintf\fR
657 \fBsprintf\fR \fBsrnd48\fR
658 \fBsrnd48\fR \fBsrnd48_r\fR
659 \fBsscanf\fR \fBssignal\fR
660 \fBstack_getbounds\fR \fBstack_inbounds\fR
661 \fBstack_setbounds\fR \fBstack_violation\fR
662 \fBstat\fR \fBstatfs\fR
663 \fBstatvfs\fR \fBstime\fR
664 \fBstr2sig\fR
665 \fBstrcasecmp\fR \fBstrcasecmp_l\fR
666 \fBstrcat\fR \fBstrchr\fR
667 \fBstrcmp\fR \fBstrcoll\fR
668 \fBstrncpy\fR \fBstrncpy_r\fR
669 \fBstrdup\fR \fBstrerror\fR
670 \fBstrerror_r\fR
671 \fBstrfmon\fR \fBstrfmon_l\fR
672 \fBstrftime\fR \fBstrptime_l\fR
673 \fBstring_to_decimal\fR
674 \fBstrlcat\fR \fBstrncpy\fR
675 \fBstrlen\fR
676 \fBstrncasecmp\fR \fBstrncasecmp_l\fR
677 \fBstrncat\fR \fBstrncmp\fR
678 \fBstrncpy\fR \fBstrprk\fR

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679 \fBstrptime\fR      \fBstrptime_l\fR
680 \fBstrchr\fR         \fBstrsep\fR
681 \fBstrsignal\fR      \fBstrspn\fR
682 \fBstrstr\fR         \fBstrtod\fR
683 \fBstrtof\fR         \fBstrtoimax\fR
684 \fBstrtok\fR         \fBstrtok_r\fR
685 \fBstrtol\fR         \fBstrtol_d\fR
686 \fBstrtol_l\fR       \fBstrtol_u\fR
687 \fBstrtoull\fR       \fBstrtoumax\fR
688 \fBstrtowns\fR       \fBstrxfrm\fR
689 \fBswab\fR           \fBswapcontext\fR
690 \fBswapctl\fR        \fBswprintf\fR
691 \fBswscanf\fR        \fBsymlink\fR
692 \fBsync\fR          \fBsync_instruction_memory\fR
693 \fBsysconf\fR        \fBsysfs\fR
694 \fBsysinfo\fR        \fBsyslog\fR
695 \fBsystem\fR         \fBtcdrain\fR
696 \fBtcf_flow\fR       \fBtcf_flush\fR
697 \fBtcf_getattr\fR    \fBtcf_getpggrp\fR
698 \fBtcf_getsid\fR     \fBtcf_sendbreak\fR
699 \fBtcf_setattr\fR    \fBtcf_setpggrp\fR
700 \fBtdelete\fR        \fBtell\fR
701 \fBtelldir\fR        \fBtempnam\fR
702 \fBtextdomain\fR     \fBtfind\fR
703 \fBtthr_continue\fR  \fBtthr_create\fR
704 \fBtthr_exit\fR      \fBtthr_getconcurrency\fR
705 \fBtthr_getprio\fR   \fBtthr_getspecific\fR
706 \fBtthr_join\fR      \fBtthr_keycreate\fR
707 \fBtthr_keycreate_once\fR
708 \fBtthr_kill\fR      \fBtthr_main\fR
709 \fBtthr_min_stack\fR \fBtthr_self\fR
710 \fBtthr_setconcurrency\fR \fBtthr_setprio\fR
711 \fBtthr_setspecific\fR \fBtthr_sigsetmask\fR
712 \fBtthr_stksegment\fR \fBtthr_suspend\fR
713 \fBtthr_yield\fR     \fBttime\fR
714 \fBttimer_create\fR  \fBttimer_delete\fR
715 \fBttimer_getoverrun\fR \fBttimer_gettime\fR
716 \fBttimer_settime\fR
717 \fBttimes\fR         \fBttimezone\fR
718 \fBtmpfile\fR        \fBtmpnam\fR
719 \fBtmpnam_r\fR       \fBtoascii\fR
720 \fBtolower\fR        \fBtolower_l\fR
721 \fBtoupper\fR        \fBtoupper_l\fR
722 \fBtowctrans\fR      \fBtowctrans_l\fR
723 \fBtowlower\fR       \fBtowlower_l\fR
724 \fBtowupper\fR       \fBtowupper_l\fR
725 \fBtruncate\fR
726 \fBtsearch\fR        \fBttyname\fR
727 \fBttyname_r\fR      \fBttyslot\fR
728 \fBtwalk\fR          \fBtzname\fR
729 \fBtzset\fR          \fBu8_strerror\fR
730 \fBu8_textprep_str\fR \fBu8_validate\fR
731 \fBuadmin\fR
732 \fBualarm\fR         \fBuconv_u16tou32\fR
733 \fBuconv_u16tou8\fR  \fBuconv_u32tou16\fR
734 \fBuconv_u32tou8\fR  \fBuconv_u8tou16\fR
735 \fBuconv_u8tou32\fR  \fBucred_free\fR
736 \fBucred_get\fR      \fBucred_getegid\fR
737 \fBucred_geteuid\fR   \fBucred_getgroups\fR
738 \fBucred_getpflags\fR \fBucred_getpid\fR
739 \fBucred_getprivset\fR \fBucred_getprojid\fR
740 \fBucred_getrgid\fR   \fBucred_getruid\fR
741 \fBucred_getsgid\fR   \fBucred_getsuid\fR
742 \fBucred_getzoneid\fR \fBucred_size\fR
743 \fBulckpwd\fR        \fBulimit\fR
744 \fBulltostr\fR       \fBumask\fR

```

```

745 \fBumount\fR        \fBumount2\fR
746 \fBuname\fR          \fBungetc\fR
747 \fBungetwc\fR        \fBunlink\fR
748 \fBunlinkat\fR       \fBunlockpt\fR
749 \fBunordered\fR      \fBunsetenv\fR
750 \fBupdwtmp\fR        \fBupdwtmpx\fR
751 \fBuselocale\fR
752 \fBusleep\fR         \fBustat\fR
753 \fButime\fR          \fButimensat\fR
754 \fButimes\fR         \fButmpname\fR
755 \fButmpxname\fR     \fBuucopy\fR
756 \fBvalloc\fR         \fBvasprintf\fR
757 \fBverr\fR           \fBverrx\fR
758 \fBvfork\fR          \fBvforkx\fR
759 \fBvfprintf\fR        \fBvfscanf\fR
760 \fBvfwprintf\fR      \fBvfwscanf\fR
761 \fBvhgup\fR          \fBvlfmt\fR
762 \fBvpfmt\fR          \fBvprintf\fR
763 \fBvscanf\fR         \fBvsnprintf\fR
764 \fBvsprintf\fR       \fBvsscanf\fR
765 \fBvswprintf\fR      \fBvswscanf\fR
766 \fBvsyslog\fR        \fBvwarn\fR
767 \fBvwarnx\fR         \fBvwprintf\fR
768 \fBvwscanf\fR        \fBwait\fR
769 \fBwait3\fR          \fBwait4\fR
770 \fBwaitid\fR         \fBwaitpid\fR
771 \fBwalkcontext\fR    \fBwarn\fR
772 \fBwarnx\fR          \fBwatoll\fR
773 \fBwcrtombs\fR       \fBwcrtombs_l\fR
774 \fBwcscat\fR
775 \fBwcscchr\fR        \fBwcscmp\fR
776 \fBwcscoll\fR        \fBwcscoll_l\fR
777 \fBwcscpy\fR
778 \fBwcscspn\fR        \fBwcstime\fR
779 \fBwcslen\fR         \fBwcscat\fR
780 \fBwcscncmp\fR       \fBwcscncpy\fR
781 \fBwcsnrtombs\fR     \fBwcsnrtombs_l\fR
782 \fBwcspbrk\fR        \fBwcscrchr\fR
783 \fBwcstrtombs\fR     \fBwcstrtombs_l\fR
784 \fBwcsspfn\fR
785 \fBwcsstr\fR         \fBwcstod\fR
786 \fBwcstof\fR         \fBwcstoimax\fR
787 \fBwcstok\fR         \fBwcstol\fR
788 \fBwcstold\fR        \fBwcstoll\fR
789 \fBwcstombs\fR       \fBwcstombs_l\fR
790 \fBwcstoul\fR
791 \fBwcstoull\fR       \fBwcstoumax\fR
792 \fBwcswcs\fR
793 \fBwcswidth\fR       \fBwcswidth_l\fR
794 \fBwcswxfrm\fR       \fBwcswxfrm_l\fR
795 \fBwctob\fR          \fBwctob_l\fR
796 \fBwctomb\fR         \fBwctomb_l\fR
797 \fBwctrans\fR        \fBwctrans_l\fR
798 \fBwctype\fR         \fBwctype_l\fR
799 \fBwcwidth\fR        \fBwcwidth_l\fR
800 \fBwmemchr\fR        \fBwmemcmp\fR
801 \fBwmemcpy\fR        \fBwmemmove\fR
802 \fBwmemset\fR        \fBwordexp\fR
803 \fBwordfree\fR       \fBwprintf\fR
804 \fBwract\fR          \fBwrite\fR
805 \fBwritev\fR         \fBwscanf\fR
806 \fBwscasecmp\fR      \fBwscat\fR
807 \fBwschr\fR          \fBwscmp\fR
808 \fBwscoll\fR         \fBwscoll_l\fR
809 \fBwscpy\fR          \fBwcspn\fR
810 \fBwsdup\fR          \fBwslen\fR

```

```

811 \fBwsncasecmp\fR      \fBwsncat\fR
812 \fBwsncmp\fR          \fBwsncpy\fR
813 \fBwspbrk\fR          \fBwsprintf\fR
814 \fBwsrchr\fR          \fBwsscanf\fR
815 \fBwsspfn\fR          \fBwstod\fR
816 \fBwstok\fR           \fBwstol\fR
817 \fBwstoll\fR          \fBwstolr\fR
818 \fBwsxfrm\fR          \fByield\fR
819 .TE

```

```

821 .sp
822 .LP
1568 The following interfaces are unique to the 32-bit version of this library:
1569 .LP

```

```

1570 .Bl -column -offset indent -compact
1571 .Sy _div64
1572 .Sy _mul64
1573 .Sy _posix_readdir_r
1574 .Sy _rem64
1575 .Sy _udiv64
1576 .Sy _urem64
1577 .Sy _bufendtab
1578 .Sy _lastbuf
1579 .Sy _s_fcntl
1580 .Sy _sys_nsig
1581 .Sy _xftw64
1582 .Sy aio_cancel64
1583 .Sy aio_error64
1584 .Sy aio_fsync64
1585 .Sy aio_read64
1586 .Sy aio_return64
1587 .Sy aio_suspend64
1588 .Sy aio_waitn64
1589 .Sy aio_write64
1590 .Sy creat64
1591 .Sy fgetpos64
1592 .Sy fopen64
1593 .Sy freopen64
1594 .Sy fseeko64
1595 .Sy fsetpos64
1596 .Sy fstat64
1597 .Sy fstatvfs64
1598 .Sy ftello64
1599 .Sy ftruncate64
1600 .Sy ftw64
1601 .Sy getdents64
1602 .Sy getrlimit64
1603 .Sy lio_listio64
1604 .Sy lockf64
1605 .Sy lseek64
1606 .Sy lstat64
1607 .Sy mkstemp64
1608 .Sy mmap64
1609 .Sy nftw64
1610 .Sy open64
1611 .Sy pread64
1612 .Sy ptrace
1613 .Sy pwrite64
1614 .Sy readdir64
1615 .Sy readdir64_r
1616 .Sy s_fcntl
1617 .Sy s_ioctl
1618 .Sy select_large_fdset
1619 .Sy setrlimit64
1620 .Sy stat64
1621 .Sy statvfs64

```

```

1622 .Sy sys_errlist
1623 .Sy sys_nerr
1624 .Sy tell64
1625 .Sy tmpfile64
1626 .Sy truncate64
1627 .El
1628 .LP
824 .sp

826 .sp
827 .TS
828 l l
829 l l .
830 \fB__div64\fR      \fB__mul64\fR
831 \fB__posix_readdir_r\fR \fB__rem64\fR
832 \fB__udiv64\fR      \fB__urem64\fR
833 \fB__bufendtab\fR      \fB__lastbuf\fR
834 \fB__s_fcntl\fR      \fB__sys_nsig\fR
835 \fB__xftw64\fR      \fB__aio_cancel64\fR
836 \fBaio_error64\fR      \fBaio_fsync64\fR
837 \fBaio_read64\fR      \fBaio_return64\fR
838 \fBaio_suspend64\fR    \fBaio_waitn64\fR
839 \fBaio_write64\fR      \fBcreat64\fR
840 \fBfgetpos64\fR      \fBfopen64\fR
841 \fBfreopen64\fR      \fBfseeko64\fR
842 \fBfsetpos64\fR      \fBfstat64\fR
843 \fBfstatvfs64\fR      \fBftello64\fR
844 \fBftruncate64\fR      \fBftw64\fR
845 \fBgetdents64\fR      \fBgetrlimit64\fR
846 \fBlio_listio64\fR      \fBblockf64\fR
847 \fBllseek64\fR      \fBlstat64\fR
848 \fBmkstemp64\fR      \fBmmap64\fR
849 \fBnftw64\fR      \fBopen64\fR
850 \fBpread64\fR      \fBptrace\fR
851 \fBpwrite64\fR      \fBreaddir64\fR
852 \fBreaddir64_r\fR      \fBs_fcntl\fR
853 \fBs_ioctl\fR      \fBselect_large_fdset\fR
854 \fBsetrlimit64\fR      \fBstat64\fR
855 \fBstatvfs64\fR      \fBsys_errlist\fR
856 \fBsys_nerr\fR      \fBtell64\fR
857 \fBtmpfile64\fR      \fBtruncate64\fR
858 .TE

```

```

860 .sp
861 .LP
1629 The following interfaces are unique to the 32-bit SPARC version of this
1630 library:

```

```

1631 .LP
1632 .Bl -column -offset indent -compact
1633 .Sy \&.div
1634 .Sy \&.mul
1635 .Sy \&.rem
1636 .Sy \&.stret1
1637 .Sy \&.stret2
1638 .Sy \&.stret4
1639 .Sy \&.stret8
1640 .Sy \&.udiv
1641 .Sy \&.umul
1642 .Sy \&.urem
1643 .Sy _Q_add
1644 .Sy _Q_cmp
1645 .Sy _Q_cmpe
1646 .Sy _Q_div
1647 .Sy _Q_dtoq
1648 .Sy _Q_feq
1649 .Sy _Q_fge

```

```

1650 .Sy _Q_fgt
1651 .Sy _Q_file
1652 .Sy _Q_flt
1653 .Sy _Q_fne
1654 .Sy _Q_itoq
1655 .Sy _Q_lltoq
1656 .Sy _Q_mul
1657 .Sy _Q_neg
1658 .Sy _Q_qtod
1659 .Sy _Q_qtoi
1660 .Sy _Q_qtoll
1661 .Sy _Q_qtos
1662 .Sy _Q_qtou
1663 .Sy _Q_qtoull
1664 .Sy _Q_sqrt
1665 .Sy _Q_stoq
1666 .Sy _Q_sub
1667 .Sy _Q_ulltoq
1668 .Sy _Q_utoq
1669 .Sy _dtoll
1670 .Sy _dtou
1671 .Sy _dtoull
1672 .Sy _ftoll
1673 .Sy _ftou
1674 .Sy _ftoull
1675 .Sy _umul64
1676 .El
1677 .Lp
864 .sp

866 .sp
867 .TS
868 1 1
869 1 1 .
870 \fB\&.div\&fR \fB\&.mul\&fR
871 \fB\&.rem\&fR \fB\&.stret1\&fR
872 \fB\&.stret2\&fR \fB\&.stret4\&fR
873 \fB\&.stret8\&fR \fB\&.udiv\&fR
874 \fB\&.umul\&fR \fB\&.urem\&fR
875 \fB_Q_add\&fR \fB_Q_cmp\&fR
876 \fB_Q_cmpe\&fR \fB_Q_div\&fR
877 \fB_Q_dtoq\&fR \fB_Q_feq\&fR
878 \fB_Q_fge\&fR \fB_Q_fgt\&fR
879 \fB_Q_fle\&fR \fB_Q_flt\&fR
880 \fB_Q_fne\&fR \fB_Q_itoq\&fR
881 \fB_Q_lltoq\&fR \fB_Q_mul\&fR
882 \fB_Q_neg\&fR \fB_Q_qtod\&fR
883 \fB_Q_qtoi\&fR \fB_Q_qtoll\&fR
884 \fB_Q_qtos\&fR \fB_Q_qtou\&fR
885 \fB_Q_qtoull\&fR \fB_Q_sqrt\&fR
886 \fB_Q_stoq\&fR \fB_Q_sub\&fR
887 \fB_Q_ulltoq\&fR \fB_Q_utoq\&fR
888 \fB__dtoll\&fR \fB__dtou\&fR
889 \fB__dtoull\&fR \fB__ftoll\&fR
890 \fB__ftou\&fR \fB__ftoull\&fR
891 \fB__umul64\&fR
892 .TE

894 .sp
895 .LP
1678 The following interfaces are unique to the 32-bit x86 version of this library:
1679 .Bl -column -offset indent -compact
1680 .Lp
1681 .Sy __fpstart
1682 .Sy _fp_hw
1683 .Sy _fpstart

```

```

1684 .Sy _fxstat
1685 .Sy _lxstat
1686 .Sy _nuname
1687 .Sy _thr_errno_addr
1688 .Sy _xmknod
1689 .Sy _xstat
1690 .Sy _nuname
1691 .El
1692 .Lp
897 .sp

899 .sp
900 .TS
901 1 1
902 1 1 .
903 \fB__fpstart\&fR \fB__fp_hw\&fR
904 \fB__fpstart\&fR \fB__fxstat\&fR
905 \fB__lxstat\&fR \fB__nuname\&fR
906 \fB__thr_errno_addr\&fR \fB__xmknod\&fR
907 \fB__xstat\&fR \fB__nuname\&fR
908 .TE

910 .sp
911 .LP
1693 The following interfaces are unique to the 64-bit SPARC version of this
1694 library:
1695 .Lp
1696 .Bl -column -offset indent -compact
1697 .Sy _Qp_add
1698 .Sy _Qp_cmp
1699 .Sy _Qp_cmpe
1700 .Sy _Qp_div
1701 .Sy _Qp_dtoq
1702 .Sy _Qp_feq
1703 .Sy _Qp_fge
1704 .Sy _Qp_fgt
1705 .Sy _Qp_file
1706 .Sy _Qp_flt
1707 .Sy _Qp_fne
1708 .Sy _Qp_itoq
1709 .Sy _Qp_mul
1710 .Sy _Qp_neg
1711 .Sy _Qp_qtod
1712 .Sy _Qp_qtoi
1713 .Sy _Qp_qtos
1714 .Sy _Qp_qtoui
1715 .Sy _Qp_qtoux
1716 .Sy _Qp_qtox
1717 .Sy _Qp_sqrt
1718 .Sy _Qp_stoq
1719 .Sy _Qp_sub
1720 .Sy _Qp_utoq
1721 .Sy _Qp_uxtoq
1722 .Sy _Qp_xtoq
1723 .Sy __align_cpy_1
1724 .Sy __align_cpy_16
1725 .Sy __align_cpy_2
1726 .Sy __align_cpy_4
1727 .Sy __align_cpy_8
1728 .Sy __dtoul
1729 .Sy __ftoul
1730 .Sy __sparc_utrap_install
1731 .El
1732 .Sh FILES
1733 .Bl -tag -width Pa
1734 .It Pa /lib/libc.so.1

```

```

914 .sp
916 .sp
917 .TS
918 1 1
919 1 1 .
920 \fB_Qp_add\fR      \fB_Qp_cmp\fR
921 \fB_Qp_cmpe\fR      \fB_Qp_div\fR
922 \fB_Qp_dtoq\fR      \fB_Qp_feq\fR
923 \fB_Qp_fge\fR        \fB_Qp_fgt\fR
924 \fB_Qp_fle\fR        \fB_Qpflt\fR
925 \fB_Qp_fne\fR        \fB_Qp_itog\fR
926 \fB_Qp_mul\fR        \fB_Qp_neg\fR
927 \fB_Qp_qtod\fR       \fB_Qp_qtoi\fR
928 \fB_Qp_qtos\fR       \fB_Qp_qtoui\fR
929 \fB_Qp_qtoux\fR      \fB_Qp_qtox\fR
930 \fB_Qp_sqrt\fR       \fB_Qp_stog\fR
931 \fB_Qp_sub\fR        \fB_Qp_uitog\fR
932 \fB_Qp_uxtog\fR      \fB_Qp_xtog\fR
933 \fB__align_cpy_1\fR   \fB__align_cpy_16\fR
934 \fB__align_cpy_2\fR   \fB__align_cpy_4\fR
935 \fB__align_cpy_8\fR   \fB__dtoul\fR
936 \fB__ftoul\fR        \fB__sparc_utrap_install\fR
937 .TE

939 .SH FILES
940 .sp
941 .ne 2
942 .na
943 \fB\lib/libc.so.1\fR
944 .ad
945 .RS 27n
1735 shared object
1736 .It Pa /lib/64/libc.so.1
947 .RE

949 .sp
950 .ne 2
951 .na
952 \fB\lib/lib/64/libc.so.1\fR
953 .ad
954 .RS 27n
1737 64-bit shared object
1738 .It Pa /lib/c_synonyms.so.1
1739 A compatibility library to provide access to obsolete
1740 .Nm
1741 synonym symbols
1742 .It Pa /lib/64/c_synonyms.so.1
1743 A 64-bit compatibility library to provide access to obsolete
1744 .Nm
1745 synonym symbols
1746 .El
1747 .Sh SEE ALSO
1748 .Xr pvs 1 ,
1749 .Xr Intro 2 ,
1750 .Xr Intro 3 ,
1751 .Xr attributes 5 ,
1752 .Xr lf64 5 ,
1753 .Xr standards 5
1754 .Sh NOTES
1755 The synonyms compatibility library,
1756 .Pa c_synonyms.so.1 ,
1757 provides a mechanism
956 .RE

958 .sp

```

```

959 .ne 2
960 .na
961 \fB\lib/lib/c_synonyms.so.1\fR
962 .ad
963 .RS 27n
964 A compatibility library to provide access to obsolete \fBlibc\fR synonym
965 symbols
966 .RE

968 .sp
969 .ne 2
970 .na
971 \fB\lib/lib/64/c_synonyms.so.1\fR
972 .ad
973 .RS 27n
974 A 64-bit compatibility library to provide access to obsolete \fBlibc\fR synonym
975 symbols
976 .RE

978 .SH ATTRIBUTES
979 .sp
980 .LP
981 See \fBattributes\fR(5) for descriptions of the following attributes:
982 .sp

984 .sp
985 .TS
986 box;
987 c | c
988 l | l .
989 ATTRIBUTE TYPE    ATTRIBUTE VALUE
990 MT-Level          Safe
991 .TE

993 .SH SEE ALSO
994 .sp
995 .LP
996 \fBbpvs\fR(1), \fBIntro\fR(2), \fBIntro\fR(3), \fBattributes\fR(5),
997 \fBlf64\fR(5), \fBstandards\fR(5)
998 .SH NOTES
999 .sp
1000 .LP
1001 The synonyms compatibility library, \fBlibc_synonyms.so.1\fR, provides a mechanism
1758 to support old applications and libraries that were mistakenly built using
1759 now-obsolete synonym symbols from
1760 .Nm .
1761 .Lp
1762 Before the advent of direct binding
1763 .Pq Fl direct
1764 .Nm provided many
1765 functions with two names. For example,
1766 .Fn getpwent
1767 and
1768 .Fn _getpwent .
1769 These two names referred to exactly the same function in
1770 .Nm .
1771 The
1003 now-obsolete synonym symbols from \fBlibc\fR.
1004 .sp
1005 .LP
1006 Before the advent of direct binding (-B direct) \fBlibc\fR provided many
1007 functions with two names. For example, \fBgetpwent()\fR and \fB_getpwent()\fR.
1008 These two names referred to exactly the same function in \fBlibc\fR. The
1772 leading-underscore symbol was intended to be used by system libraries in order
1773 to avoid conflicting with an application that might define its own version of
1774 .Fn getpwent

```

```

1775 with completely different semantics. Standard-conforming
1011 \fBgetpwent()\fR with completely different semantics. Standard-conforming
1776 applications may not define and use function names with leading underscores.
1777 .Lp
1778 System libraries are now built with direct binding. This means that a
1779 system library that calls
1780 .Fn getpwent
1781 will bind directly to the instance
1782 of
1783 .Fn getpwent
1784 in
1785 .Nm ,
1786 even if the application to which it is
1787 linked defines a different
1788 .Fn getpwent
1789 for its own use. The application
1790 binds to its instance of
1791 .Fn getpwent
1792 and there is no resulting conflict.
1013 .sp
1014 .LP
1015 Solaris system libraries are now built with direct binding. This means that a
1016 system library that calls \fBgetpwent()\fR will bind directly to the instance
1017 of \fBgetpwent()\fR in \fBlibc\fR, even if the application to which it is
1018 linked defines a different \fBgetpwent()\fR for its own use. The application
1019 binds to its instance of \fBgetpwent()\fR and there is no resulting conflict.
1793 The direct binding mechanism is equally available to libraries not delivered
1794 with the system.
1795 .Lp
1021 with Solaris.
1022 .sp
1023 .LP
1796 As a result of this evolution, most of the leading-underscore synonym symbols
1797 have been removed from
1798 .Nm .
1799 This means that applications that call
1025 have been removed from \fBlibc\fR. This means that applications that call
1800 these now-obsolete function names will cease to work. They will typically draw
1801 the error:
1802 .Bd -literal -offset indent
1028 .sp
1029 .in +2
1030 .nf
1803 $ ./application
1804 ld.so.1: fatal: relocation error: symbol _getpwent:
1805 referenced symbol not found
1806 Killed
1807 .Ed
1808 .Lp
1035 .fi
1036 .in -2
1037 .sp

1039 .sp
1040 .LP
1809 All of the old leading-underscore symbols have been copied to the synonyms
1810 compatibility library. This library simply redirects the calls to the
1811 non-underscore instances of the corresponding functions in
1812 .Nm .
1813 .Lp
1814 .Dl $ LD_PRELOAD=c_synonyms.so.1 ./application
1815 .Lp
1043 non-underscore instances of the corresponding functions in \fBlibc\fR. Use it
1044 as a pre-loaded object:
1045 .sp
1046 .in +2

```

```

1047 .nf
1048 $ LD_PRELOAD=c_synonyms.so.1 ./application
1049 .fi
1050 .in -2
1051 .sp

1053 .sp
1054 .LP
1816 The synonyms compatibility library is intended neither to enable the generation
1817 of applications that call the obsolete leading-underscore synonym functions,
1818 nor to endorse this particular programming practice.

```


new/usr/src/man/man3nsl/Makefile

1

19080 Sun Jul 27 18:01:36 2014

new/usr/src/man/man3nsl/Makefile

Finished obsoleting interfaces for XPG7.

```
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 2013 Nexenta Systems, Inc. All rights reserved.
15 # Copyright 2014 Garrett D'Amore <garrett@damore.org>
16 #
```

```
18 include      $(SRC)/Makefile.master
```

```
20 MANSECT=     3nsl
```

```
22 MANFILES=    dial.3nsl          \
23               doconfig.3nsl      \
24               gethostbyname.3nsl  \
25 25 gethostent.3nsl                \
26               getipsecalgbyname.3nsl \
27               getipsecprotobyname.3nsl \
28               getnetconfig.3nsl   \
29               getnetpath.3nsl     \
30               getpublickey.3nsl   \
31               getrpcbyname.3nsl   \
32               netdir.3nsl         \
33               nlsgetcall.3nsl     \
34               nlsprovider.3nsl    \
35               nlsrequest.3nsl     \
36               rpc.3nsl            \
37               rpc_clnt_auth.3nsl   \
38               rpc_clnt_calls.3nsl  \
39               rpc_clnt_create.3nsl \
40               rpc_control.3nsl     \
41               rpc_gss_get_error.3nsl \
42               rpc_gss_get_mechanisms.3nsl \
43               rpc_gss_get_principal_name.3nsl \
44               rpc_gss_getcred.3nsl \
45               rpc_gss_max_data_length.3nsl \
46               rpc_gss_mech_to_oid.3nsl \
47               rpc_gss_seccreate.3nsl \
48               rpc_gss_set_callback.3nsl \
49               rpc_gss_set_defaults.3nsl \
50               rpc_gss_set_svc_name.3nsl \
51               rpc_soc.3nsl        \
52               rpc_svc_calls.3nsl  \
53               rpc_svc_create.3nsl \
54               rpc_svc_err.3nsl    \
55               rpc_svc_input.3nsl  \
56               rpc_svc_reg.3nsl    \
57               rpc_xdr.3nsl        \
58               rpcbind.3nsl        \
59               rpcsec_gss.3nsl     \
60               secure_rpc.3nsl     \
61               t_accept.3nsl       \
```

new/usr/src/man/man3nsl/Makefile

2

```
62         t_alloc.3nsl          \
63         t_bind.3nsl           \
64         t_close.3nsl          \
65         t_connect.3nsl        \
66         t_errno.3nsl          \
67         t_error.3nsl          \
68         t_free.3nsl           \
69         t_getinfo.3nsl        \
70         t_getprotaddr.3nsl    \
71         t_getstate.3nsl       \
72         t_listen.3nsl         \
73         t_look.3nsl           \
74         t_open.3nsl           \
75         t_optmgmt.3nsl        \
76         t_rcv.3nsl            \
77         t_rcvconnect.3nsl     \
78         t_rcvdis.3nsl         \
79         t_rcvrel.3nsl         \
80         t_rcvreldata.3nsl     \
81         t_rcvudata.3nsl       \
82         t_rcvuderr.3nsl       \
83         t_rcvv.3nsl           \
84         t_rcvvudata.3nsl      \
85         t_snd.3nsl            \
86         t_snddis.3nsl         \
87         t_sndrel.3nsl         \
88         t_sndreldata.3nsl     \
89         t_sndudata.3nsl       \
90         t_sndv.3nsl           \
91         t_sndvudata.3nsl      \
92         t_strerror.3nsl       \
93         t_sync.3nsl           \
94         t_sysconf.3nsl        \
95         t_unbind.3nsl         \
96         xdr.3nsl              \
97         xdr_admin.3nsl        \
98         xdr_complex.3nsl      \
99         xdr_create.3nsl       \
100        xdr_simple.3nsl        \
101        yp_update.3nsl         \
102        ypclnt.3nsl            \
104 MANLINKS=    auth_destroy.3nsl  \
105               authdes_create.3nsl \
106               authdes_getucred.3nsl \
107               authdes_seccreate.3nsl \
108               authnone_create.3nsl \
109               authsys_create.3nsl  \
110               authsys_create_default.3nsl \
111               authunix_create.3nsl \
112               authunix_create_default.3nsl \
113               callrpc.3nsl         \
114               clnt_broadcast.3nsl  \
115               clnt_call.3nsl       \
116               clnt_control.3nsl    \
117               clnt_create.3nsl     \
118               clnt_create_timed.3nsl \
119               clnt_create_vers.3nsl \
120               clnt_create_vers_timed.3nsl \
121               clnt_destroy.3nsl    \
122               clnt_dg_create.3nsl  \
123               clnt_door_create.3nsl \
124               clnt_freeres.3nsl    \
125               clnt_geterr.3nsl     \
126               clnt_pcreateerror.3nsl \
127               clnt_perrno.3nsl     \
```

```
128      clnt_perror.3nsl      \
129      clnt_raw_create.3nsl  \
130      clnt_send.3nsl        \
131      clnt_spccreateerror.3nsl \
132      clnt_sperrno.3nsl     \
133      clnt_sperror.3nsl     \
134      clnt_tli_create.3nsl  \
135      clnt_tp_create.3nsl   \
136      clnt_tp_create_timed.3nsl \
137      clnt_vc_create.3nsl   \
138      clntraw_create.3nsl   \
139      clnttcp_create.3nsl   \
140      clntudp_bufcreate.3nsl \
141      clntudp_create.3nsl   \
142      endhostent.3nsl       \
143      endnetconfig.3nsl     \
144      endnetpath.3nsl       \
145      endrpcent.3nsl        \
146      freeipsecalgent.3nsl  \
147      freenetconfigent.3nsl \
148      get_myaddress.3nsl    \
149      gethostbyaddr.3nsl    \
150      gethostbyaddr_r.3nsl  \
151      gethostbyname.3nsl    \
152      gethostent.3nsl       \
153      gethostent_r.3nsl     \
154      getipsecalgbynum.3nsl \
155      getipsecprotobynum.3nsl \
156      getnetconfigent.3nsl  \
157      getnetname.3nsl       \
158      getrpcbyname_r.3nsl   \
159      getrpcbynumber.3nsl   \
160      getrpcbynumber_r.3nsl \
161      getrpcent.3nsl        \
162      getrpcent_r.3nsl      \
163      getrpcport.3nsl       \
164      getsecretkey.3nsl     \
165      host2netname.3nsl     \
166      key_decryptsession.3nsl \
167      key_encryptsession.3nsl \
168      key_gendes.3nsl       \
169      key_secretkey_is_set.3nsl \
170      key_setsecret.3nsl    \
171      nc_perror.3nsl        \
172      nc_sperror.3nsl       \
173      netdir_free.3nsl      \
174      netdir_getbyaddr.3nsl \
175      netdir_getbyname.3nsl \
176      netdir_mergeaddr.3nsl \
177      netdir_options.3nsl   \
178      netdir_perror.3nsl    \
179      netdir_sperror.3nsl   \
180      netname2host.3nsl     \
181      netname2user.3nsl     \
182      pmap_getmaps.3nsl     \
183      pmap_getport.3nsl     \
184      pmap_rmtcall.3nsl     \
185      pmap_set.3nsl         \
186      pmap_unset.3nsl       \
187      publickey.3nsl        \
188      registerrpc.3nsl      \
189      rpc_broadcast.3nsl    \
190      rpc_broadcast_exp.3nsl \
191      rpc_call.3nsl         \
192      rpc_createerr.3nsl    \
193      rpc_gss_get_mech_info.3nsl \
```

```
193      rpc_gss_get_versions.3nsl \
194      rpc_gss_is_installed.3nsl \
195      rpc_gss_gop_to_num.3nsl    \
196      rpc_gss_svc_max_data_length.3nsl \
197      rpc_reg.3nsl              \
198      rpcb_getaddr.3nsl         \
199      rpcb_getmaps.3nsl        \
200      rpcb_gettime.3nsl        \
201      rpcb_rmtcall.3nsl        \
202      rpcb_set.3nsl             \
203      rpcb_unset.3nsl          \
204      sethostent.3nsl           \
205      setnetconfig.3nsl        \
206      setnetpath.3nsl          \
207      setrpcent.3nsl           \
208      svc_add_input.3nsl        \
209      svc_auth_reg.3nsl         \
210      svc_control.3nsl          \
211      svc_create.3nsl           \
212      svc_destroy.3nsl          \
213      svc_dg_create.3nsl        \
214      svc_dg_enablecache.3nsl   \
215      svc_done.3nsl             \
216      svc_door_create.3nsl      \
217      svc_exit.3nsl             \
218      svc_fd_create.3nsl        \
219      svc_fd_negotiate_ucred.3nsl \
220      svc_fds.3nsl              \
221      svc_fdset.3nsl            \
222      svc_freeargs.3nsl         \
223      svc_getargs.3nsl          \
224      svc_getcaller.3nsl        \
225      svc_getcallerucred.3nsl   \
226      svc_getreq.3nsl           \
227      svc_getreq_common.3nsl    \
228      svc_getreq_poll.3nsl      \
229      svc_getreqset.3nsl        \
230      svc_getrpccaller.3nsl     \
231      svc_max_pollfd.3nsl       \
232      svc_pollfd.3nsl           \
233      svc_raw_create.3nsl       \
234      svc_reg.3nsl              \
235      svc_register.3nsl         \
236      svc_remove_input.3nsl     \
237      svc_run.3nsl              \
238      svc_sendreply.3nsl        \
239      svc_tli_create.3nsl       \
240      svc_tp_create.3nsl        \
241      svc_unreg.3nsl            \
242      svc_unregister.3nsl       \
243      svc_vc_create.3nsl        \
244      svcerr_auth.3nsl          \
245      svcerr_decode.3nsl        \
246      svcerr_noproc.3nsl        \
247      svcerr_noprog.3nsl        \
248      svcerr_progvers.3nsl      \
249      svcerr_systemerr.3nsl     \
250      svcerr_weakauth.3nsl      \
251      svcfld_create.3nsl        \
252      svcraw_create.3nsl        \
253      svctcp_create.3nsl        \
254      svcudp_bufcreate.3nsl     \
255      svcudp_create.3nsl        \
256      taddr2uaddr.3nsl         \
257      uaddr2taddr.3nsl         \
258      undial.3nsl              \
```

```

259 user2netname.3nsl \
260 xdr_accepted_reply.3nsl \
261 xdr_array.3nsl \
262 xdr_authsys_parms.3nsl \
263 xdr_authunix_parms.3nsl \
264 xdr_bool.3nsl \
265 xdr_bytes.3nsl \
266 xdr_callhdr.3nsl \
267 xdr_callmsg.3nsl \
268 xdr_char.3nsl \
269 xdr_control.3nsl \
270 xdr_destroy.3nsl \
271 xdr_double.3nsl \
272 xdr_enum.3nsl \
273 xdr_float.3nsl \
274 xdr_free.3nsl \
275 xdr_getpos.3nsl \
276 xdr_hyper.3nsl \
277 xdr_inline.3nsl \
278 xdr_int.3nsl \
279 xdr_long.3nsl \
280 xdr_longlong_t.3nsl \
281 xdr_opaque.3nsl \
282 xdr_opaque_auth.3nsl \
283 xdr_pointer.3nsl \
284 xdr_quadruple.3nsl \
285 xdr_reference.3nsl \
286 xdr_rejected_reply.3nsl \
287 xdr_replymsg.3nsl \
288 xdr_setpos.3nsl \
289 xdr_short.3nsl \
290 xdr_sizeof.3nsl \
291 xdr_string.3nsl \
292 xdr_u_char.3nsl \
293 xdr_u_hyper.3nsl \
294 xdr_u_int.3nsl \
295 xdr_u_long.3nsl \
296 xdr_u_longlong_t.3nsl \
297 xdr_u_short.3nsl \
298 xdr_union.3nsl \
299 xdr_vector.3nsl \
300 xdr_void.3nsl \
301 xdr_wrapstring.3nsl \
302 xdrmem_create.3nsl \
303 xdrrec_create.3nsl \
304 xdrrec_endofrecord.3nsl \
305 xdrrec_eof.3nsl \
306 xdrrec_readbytes.3nsl \
307 xdrrec_skiprecord.3nsl \
308 xdrstdio_create.3nsl \
309 xprt_register.3nsl \
310 xprt_unregister.3nsl \
311 yp_all.3nsl \
312 yp_bind.3nsl \
313 yp_first.3nsl \
314 yp_get_default_domain.3nsl \
315 yp_master.3nsl \
316 yp_match.3nsl \
317 yp_next.3nsl \
318 yp_order.3nsl \
319 yp_unbind.3nsl \
320 yperr_string.3nsl \
321 ypprot_err.3nsl \
323 undial.3nsl := LINKSRC = dial.3nsl

```

```

324 endhostent.3nsl := LINKSRC = gethostbyname.3nsl
325 gethostbyaddr.3nsl := LINKSRC = gethostbyname.3nsl
326 gethostbyaddr_r.3nsl := LINKSRC = gethostbyname.3nsl
327 gethostbyname_r.3nsl := LINKSRC = gethostbyname.3nsl
328 gethostent.3nsl := LINKSRC = gethostbyname.3nsl
329 gethostent_r.3nsl := LINKSRC = gethostbyname.3nsl
330 sethostent.3nsl := LINKSRC = gethostbyname.3nsl

329 endhostent.3nsl := LINKSRC = gethostent.3nsl
330 gethostent_r.3nsl := LINKSRC = gethostent.3nsl
331 sethostent.3nsl := LINKSRC = gethostent.3nsl

333 freeipsecalgent.3nsl := LINKSRC = getipsecalgbyname.3nsl
334 getipsecalgbyname.3nsl := LINKSRC = getipsecalgbyname.3nsl

336 getipsecprotobynum.3nsl := LINKSRC = getipsecprotobynum.3nsl

338 endnetconfig.3nsl := LINKSRC = getnetconfig.3nsl
339 freenetconfig.3nsl := LINKSRC = getnetconfig.3nsl
340 getnetconfig.3nsl := LINKSRC = getnetconfig.3nsl
341 nc_perror.3nsl := LINKSRC = getnetconfig.3nsl
342 nc_serror.3nsl := LINKSRC = getnetconfig.3nsl
343 setnetconfig.3nsl := LINKSRC = getnetconfig.3nsl

345 endnetpath.3nsl := LINKSRC = getnetpath.3nsl
346 setnetpath.3nsl := LINKSRC = getnetpath.3nsl

348 getsecretkey.3nsl := LINKSRC = getpublickey.3nsl
349 publickey.3nsl := LINKSRC = getpublickey.3nsl

351 endrpcnt.3nsl := LINKSRC = getrpcbyname.3nsl
352 getrpcbyname_r.3nsl := LINKSRC = getrpcbyname.3nsl
353 getrpcbnumber.3nsl := LINKSRC = getrpcbyname.3nsl
354 getrpcbnumber_r.3nsl := LINKSRC = getrpcbyname.3nsl
355 getrpcnt.3nsl := LINKSRC = getrpcbyname.3nsl
356 getrpcnt_r.3nsl := LINKSRC = getrpcbyname.3nsl
357 setrpcnt.3nsl := LINKSRC = getrpcbyname.3nsl

359 netdir_free.3nsl := LINKSRC = netdir.3nsl
360 netdir_getbyaddr.3nsl := LINKSRC = netdir.3nsl
361 netdir_getbyname.3nsl := LINKSRC = netdir.3nsl
362 netdir_mergeaddr.3nsl := LINKSRC = netdir.3nsl
363 netdir_options.3nsl := LINKSRC = netdir.3nsl
364 netdir_perror.3nsl := LINKSRC = netdir.3nsl
365 netdir_serror.3nsl := LINKSRC = netdir.3nsl
366 taddr2uaddr.3nsl := LINKSRC = netdir.3nsl
367 uaddr2taddr.3nsl := LINKSRC = netdir.3nsl

369 auth_destroy.3nsl := LINKSRC = rpc_clnt_auth.3nsl
370 authnone_create.3nsl := LINKSRC = rpc_clnt_auth.3nsl
371 authsys_create.3nsl := LINKSRC = rpc_clnt_auth.3nsl
372 authsys_create_default.3nsl := LINKSRC = rpc_clnt_auth.3nsl

374 clnt_call.3nsl := LINKSRC = rpc_clnt_calls.3nsl
375 clnt_freeres.3nsl := LINKSRC = rpc_clnt_calls.3nsl
376 clnt_geterr.3nsl := LINKSRC = rpc_clnt_calls.3nsl
377 clnt_perrno.3nsl := LINKSRC = rpc_clnt_calls.3nsl
378 clnt_perror.3nsl := LINKSRC = rpc_clnt_calls.3nsl
379 clnt_send.3nsl := LINKSRC = rpc_clnt_calls.3nsl
380 clnt_serror.3nsl := LINKSRC = rpc_clnt_calls.3nsl
381 clnt_serror.3nsl := LINKSRC = rpc_clnt_calls.3nsl
382 rpc_broadcast.3nsl := LINKSRC = rpc_clnt_calls.3nsl
383 rpc_broadcast_exp.3nsl := LINKSRC = rpc_clnt_calls.3nsl
384 rpc_call.3nsl := LINKSRC = rpc_clnt_calls.3nsl

386 clnt_control.3nsl := LINKSRC = rpc_clnt_create.3nsl

```

```

387 clnt_create.3nsl      := LINKSRC = rpc_clnt_create.3nsl
388 clnt_create_timed.3nsl := LINKSRC = rpc_clnt_create.3nsl
389 clnt_create_vers.3nsl  := LINKSRC = rpc_clnt_create.3nsl
390 clnt_create_vers_timed.3nsl := LINKSRC = rpc_clnt_create.3nsl
391 clnt_destroy.3nsl      := LINKSRC = rpc_clnt_create.3nsl
392 clnt_dg_create.3nsl    := LINKSRC = rpc_clnt_create.3nsl
393 clnt_door_create.3nsl  := LINKSRC = rpc_clnt_create.3nsl
394 clnt_pcreateerror.3nsl := LINKSRC = rpc_clnt_create.3nsl
395 clnt_raw_create.3nsl   := LINKSRC = rpc_clnt_create.3nsl
396 clnt_spccreateerror.3nsl := LINKSRC = rpc_clnt_create.3nsl
397 clnt_tli_create.3nsl   := LINKSRC = rpc_clnt_create.3nsl
398 clnt_tp_create.3nsl    := LINKSRC = rpc_clnt_create.3nsl
399 clnt_tp_create_timed.3nsl := LINKSRC = rpc_clnt_create.3nsl
400 clnt_vc_create.3nsl    := LINKSRC = rpc_clnt_create.3nsl
401 rpc_createerr.3nsl     := LINKSRC = rpc_clnt_create.3nsl

403 rpc_gss_get_mech_info.3nsl := LINKSRC = rpc_gss_get_mechanisms.3nsl
404 rpc_gss_get_versions.3nsl  := LINKSRC = rpc_gss_get_mechanisms.3nsl
405 rpc_gss_is_installed.3nsl  := LINKSRC = rpc_gss_get_mechanisms.3nsl

407 rpc_gss_svc_max_data_length.3nsl := LINKSRC = rpc_gss_max_data_length.3nsl

409 rpc_gss_gop_to_num.3nsl := LINKSRC = rpc_gss_mech_to_oid.3nsl

411 authdes_create.3nsl      := LINKSRC = rpc_soc.3nsl
412 authunix_create.3nsl     := LINKSRC = rpc_soc.3nsl
413 authunix_create_default.3nsl := LINKSRC = rpc_soc.3nsl
414 callrpc.3nsl             := LINKSRC = rpc_soc.3nsl
415 clnt_broadcast.3nsl      := LINKSRC = rpc_soc.3nsl
416 clntraw_create.3nsl      := LINKSRC = rpc_soc.3nsl
417 clnttcp_create.3nsl      := LINKSRC = rpc_soc.3nsl
418 clntudp_bufcreate.3nsl   := LINKSRC = rpc_soc.3nsl
419 clntudp_create.3nsl      := LINKSRC = rpc_soc.3nsl
420 get_myaddress.3nsl       := LINKSRC = rpc_soc.3nsl
421 getrpcport.3nsl          := LINKSRC = rpc_soc.3nsl
422 pmap_getmaps.3nsl        := LINKSRC = rpc_soc.3nsl
423 pmap_getport.3nsl        := LINKSRC = rpc_soc.3nsl
424 pmap_rmtcall.3nsl        := LINKSRC = rpc_soc.3nsl
425 pmap_set.3nsl            := LINKSRC = rpc_soc.3nsl
426 pmap_unset.3nsl         := LINKSRC = rpc_soc.3nsl
427 registerrpc.3nsl         := LINKSRC = rpc_soc.3nsl
428 svc_fds.3nsl             := LINKSRC = rpc_soc.3nsl
429 svc_getcaller.3nsl       := LINKSRC = rpc_soc.3nsl
430 svc_getreg.3nsl          := LINKSRC = rpc_soc.3nsl
431 svc_register.3nsl        := LINKSRC = rpc_soc.3nsl
432 svc_unregister.3nsl      := LINKSRC = rpc_soc.3nsl
433 svcd_create.3nsl         := LINKSRC = rpc_soc.3nsl
434 svcraw_create.3nsl       := LINKSRC = rpc_soc.3nsl
435 svctcp_create.3nsl       := LINKSRC = rpc_soc.3nsl
436 svcdudp_bufcreate.3nsl   := LINKSRC = rpc_soc.3nsl
437 svcdudp_create.3nsl      := LINKSRC = rpc_soc.3nsl
438 xdr_authunix_parms.3nsl   := LINKSRC = rpc_soc.3nsl

440 svc_dg_enablecache.3nsl := LINKSRC = rpc_svc_calls.3nsl
441 svc_done.3nsl           := LINKSRC = rpc_svc_calls.3nsl
442 svc_exit.3nsl           := LINKSRC = rpc_svc_calls.3nsl
443 svc_fd_negotiate_ucred.3nsl := LINKSRC = rpc_svc_calls.3nsl
444 svc_fdset.3nsl          := LINKSRC = rpc_svc_calls.3nsl
445 svc_freeargs.3nsl       := LINKSRC = rpc_svc_calls.3nsl
446 svc_getargs.3nsl        := LINKSRC = rpc_svc_calls.3nsl
447 svc_getcallerucred.3nsl := LINKSRC = rpc_svc_calls.3nsl
448 svc_getreg_common.3nsl  := LINKSRC = rpc_svc_calls.3nsl
449 svc_getreg_poll.3nsl    := LINKSRC = rpc_svc_calls.3nsl
450 svc_getreqset.3nsl       := LINKSRC = rpc_svc_calls.3nsl
451 svc_getrpccaller.3nsl    := LINKSRC = rpc_svc_calls.3nsl
452 svc_max_pollfd.3nsl     := LINKSRC = rpc_svc_calls.3nsl

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453 svc_pollfd.3nsl      := LINKSRC = rpc_svc_calls.3nsl
454 svc_run.3nsl          := LINKSRC = rpc_svc_calls.3nsl
455 svc_sendreply.3nsl    := LINKSRC = rpc_svc_calls.3nsl

457 svc_control.3nsl     := LINKSRC = rpc_svc_create.3nsl
458 svc_create.3nsl       := LINKSRC = rpc_svc_create.3nsl
459 svc_destroy.3nsl      := LINKSRC = rpc_svc_create.3nsl
460 svc_dg_create.3nsl     := LINKSRC = rpc_svc_create.3nsl
461 svc_door_create.3nsl   := LINKSRC = rpc_svc_create.3nsl
462 svc_fd_create.3nsl     := LINKSRC = rpc_svc_create.3nsl
463 svc_raw_create.3nsl    := LINKSRC = rpc_svc_create.3nsl
464 svc_tli_create.3nsl    := LINKSRC = rpc_svc_create.3nsl
465 svc_tp_create.3nsl     := LINKSRC = rpc_svc_create.3nsl
466 svc_vc_create.3nsl     := LINKSRC = rpc_svc_create.3nsl

468 svcerr_auth.3nsl      := LINKSRC = rpc_svc_err.3nsl
469 svcerr_decode.3nsl    := LINKSRC = rpc_svc_err.3nsl
470 svcerr_noproc.3nsl    := LINKSRC = rpc_svc_err.3nsl
471 svcerr_noprog.3nsl    := LINKSRC = rpc_svc_err.3nsl
472 svcerr_progvers.3nsl  := LINKSRC = rpc_svc_err.3nsl
473 svcerr_systemerr.3nsl := LINKSRC = rpc_svc_err.3nsl
474 svcerr_weakauth.3nsl  := LINKSRC = rpc_svc_err.3nsl

476 svc_add_input.3nsl    := LINKSRC = rpc_svc_input.3nsl
477 svc_remove_input.3nsl := LINKSRC = rpc_svc_input.3nsl

479 rpc_reg.3nsl          := LINKSRC = rpc_svc_reg.3nsl
480 svc_auth_reg.3nsl     := LINKSRC = rpc_svc_reg.3nsl
481 svc_reg.3nsl          := LINKSRC = rpc_svc_reg.3nsl
482 svc_unreg.3nsl        := LINKSRC = rpc_svc_reg.3nsl
483 xpirt_register.3nsl    := LINKSRC = rpc_svc_reg.3nsl
484 xpirt_unregister.3nsl  := LINKSRC = rpc_svc_reg.3nsl

486 xdr_accepted_reply.3nsl := LINKSRC = rpc_xdr.3nsl
487 xdr_authsys_parms.3nsl  := LINKSRC = rpc_xdr.3nsl
488 xdr_callhdr.3nsl        := LINKSRC = rpc_xdr.3nsl
489 xdr_callmsg.3nsl        := LINKSRC = rpc_xdr.3nsl
490 xdr_opaque_auth.3nsl    := LINKSRC = rpc_xdr.3nsl
491 xdr_rejected_reply.3nsl  := LINKSRC = rpc_xdr.3nsl
492 xdr_replymsg.3nsl       := LINKSRC = rpc_xdr.3nsl

494 rpcb_getaddr.3nsl      := LINKSRC = rpcbind.3nsl
495 rpcb_getmaps.3nsl      := LINKSRC = rpcbind.3nsl
496 rpcb_gettime.3nsl      := LINKSRC = rpcbind.3nsl
497 rpcb_rmtcall.3nsl      := LINKSRC = rpcbind.3nsl
498 rpcb_set.3nsl          := LINKSRC = rpcbind.3nsl
499 rpcb_unset.3nsl        := LINKSRC = rpcbind.3nsl

501 authdes_getucred.3nsl  := LINKSRC = secure_rpc.3nsl
502 authdes_seccreate.3nsl := LINKSRC = secure_rpc.3nsl
503 getnetname.3nsl        := LINKSRC = secure_rpc.3nsl
504 host2netname.3nsl      := LINKSRC = secure_rpc.3nsl
505 key_decryptsession.3nsl := LINKSRC = secure_rpc.3nsl
506 key_encryptsession.3nsl := LINKSRC = secure_rpc.3nsl
507 key_gendes.3nsl        := LINKSRC = secure_rpc.3nsl
508 key_secretkey_is_set.3nsl := LINKSRC = secure_rpc.3nsl
509 key_setsecret.3nsl     := LINKSRC = secure_rpc.3nsl
510 netname2host.3nsl      := LINKSRC = secure_rpc.3nsl
511 netname2user.3nsl      := LINKSRC = secure_rpc.3nsl
512 user2netname.3nsl     := LINKSRC = secure_rpc.3nsl

514 xdr_control.3nsl       := LINKSRC = xdr_admin.3nsl
515 xdr_getpos.3nsl        := LINKSRC = xdr_admin.3nsl
516 xdr_inline.3nsl        := LINKSRC = xdr_admin.3nsl
517 xdr_setpos.3nsl        := LINKSRC = xdr_admin.3nsl
518 xdr_sizeof.3nsl        := LINKSRC = xdr_admin.3nsl

```

```
519 xdrrec_endofrecord.3nsl      := LINKSRC = xdr_admin.3nsl
520 xdrrec_eof.3nsl              := LINKSRC = xdr_admin.3nsl
521 xdrrec_readbytes.3nsl        := LINKSRC = xdr_admin.3nsl
522 xdrrec_skiprecord.3nsl       := LINKSRC = xdr_admin.3nsl

524 xdr_array.3nsl               := LINKSRC = xdr_complex.3nsl
525 xdr_bytes.3nsl               := LINKSRC = xdr_complex.3nsl
526 xdr_opaque.3nsl              := LINKSRC = xdr_complex.3nsl
527 xdr_pointer.3nsl             := LINKSRC = xdr_complex.3nsl
528 xdr_reference.3nsl           := LINKSRC = xdr_complex.3nsl
529 xdr_string.3nsl              := LINKSRC = xdr_complex.3nsl
530 xdr_union.3nsl                := LINKSRC = xdr_complex.3nsl
531 xdr_vector.3nsl              := LINKSRC = xdr_complex.3nsl
532 xdr_wrapstring.3nsl          := LINKSRC = xdr_complex.3nsl

534 xdr_destroy.3nsl             := LINKSRC = xdr_create.3nsl
535 xdrmem_create.3nsl            := LINKSRC = xdr_create.3nsl
536 xdrrec_create.3nsl           := LINKSRC = xdr_create.3nsl
537 xdrstdio_create.3nsl         := LINKSRC = xdr_create.3nsl

539 xdr_bool.3nsl                := LINKSRC = xdr_simple.3nsl
540 xdr_char.3nsl                := LINKSRC = xdr_simple.3nsl
541 xdr_double.3nsl              := LINKSRC = xdr_simple.3nsl
542 xdr_enum.3nsl                := LINKSRC = xdr_simple.3nsl
543 xdr_float.3nsl               := LINKSRC = xdr_simple.3nsl
544 xdr_free.3nsl                := LINKSRC = xdr_simple.3nsl
545 xdr_hyper.3nsl               := LINKSRC = xdr_simple.3nsl
546 xdr_int.3nsl                 := LINKSRC = xdr_simple.3nsl
547 xdr_long.3nsl                := LINKSRC = xdr_simple.3nsl
548 xdr_longlong_t.3nsl          := LINKSRC = xdr_simple.3nsl
549 xdr_quadruple.3nsl           := LINKSRC = xdr_simple.3nsl
550 xdr_short.3nsl               := LINKSRC = xdr_simple.3nsl
551 xdr_u_char.3nsl              := LINKSRC = xdr_simple.3nsl
552 xdr_u_hyper.3nsl             := LINKSRC = xdr_simple.3nsl
553 xdr_u_int.3nsl               := LINKSRC = xdr_simple.3nsl
554 xdr_u_long.3nsl              := LINKSRC = xdr_simple.3nsl
555 xdr_u_longlong_t.3nsl        := LINKSRC = xdr_simple.3nsl
556 xdr_u_short.3nsl             := LINKSRC = xdr_simple.3nsl
557 xdr_void.3nsl                := LINKSRC = xdr_simple.3nsl

559 yp_all.3nsl                  := LINKSRC = ypclnt.3nsl
560 yp_bind.3nsl                  := LINKSRC = ypclnt.3nsl
561 yp_first.3nsl                 := LINKSRC = ypclnt.3nsl
562 yp_get_default_domain.3nsl    := LINKSRC = ypclnt.3nsl
563 yp_master.3nsl                := LINKSRC = ypclnt.3nsl
564 yp_match.3nsl                 := LINKSRC = ypclnt.3nsl
565 yp_next.3nsl                  := LINKSRC = ypclnt.3nsl
566 yp_order.3nsl                 := LINKSRC = ypclnt.3nsl
567 yp_unbind.3nsl                := LINKSRC = ypclnt.3nsl
568 yperr_string.3nsl             := LINKSRC = ypclnt.3nsl
569 ypprot_err.3nsl               := LINKSRC = ypclnt.3nsl

571 .KEEP_STATE:

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

575 install:     $(ROOTMANFILES) $(ROOTMANLINKS)
```

new/usr/src/man/man3nsl/gethostbyname.3nsl

1

```
*****
12488 Sun Jul 27 18:01:36 2014
new/usr/src/man/man3nsl/gethostbyname.3nsl
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wcscasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
Finished obsoleting interfaces for XPG7.
*****
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12 .Dd Jul 22, 2014
13 .Dt GETHOSTBYNAME 3NSL
14 .Os
15 .Sh NAME
16 .Nm gethostbyname ,
17 .Nm gethostbyname_r ,
18 .Nm gethostbyaddr ,
19 .Nm gethostbyaddr_r
20 .Nd lookup network host entry
21 .Sh SYNOPSIS
22 .Ic cc
23 .Op Ar flag No Ns ...
24 .Ar file No Ns ...
25 .Fl lns1
26 .Op Ar library No Ns ...
27 .Lp
28 .In netdb.h
29 .Ft "struct hostent *"
30 .Fn gethostbyname "const char *name"
31 .Ft "struct hostent *"
32 .Fo gethostbyname_r
33 .Fa "const char *name"
34 .Fa "struct hostent *result"
35 .Fa "char *buffer"
36 .Fa "int buflen"
37 .Fa "int *h_errnop"
38 .Fc
39 .Ft "struct hostent *"
40 .Fo gethostbyaddr
41 .Fa "const char *addr"
42 .Fa "socklen_t len"
43 .Fa "int type"
44 .Fc
45 .Ft "struct hostent *"
46 .Fo gethostbyaddr_r
47 .Fa "const char *addr"
48 .Fa "int length"
49 .Fa "int type"
50 .Fa "struct hostent *result"
51 .Fa "char *buffer"
52 .Fa "int buflen"
53 .Fa "int *h_errnop"
54 .Fc
55 .Sh DESCRIPTION
12 .TH GETHOSTBYNAME 3NSL "Sep 10, 2013"
13 .SH NAME
```

new/usr/src/man/man3nsl/gethostbyname.3nsl

2

```
14 gethostbyname, gethostbyname_r, gethostbyaddr, gethostbyaddr_r, gethostent,
15 gethostent_r, sethostent, endhostent \- get network host entry
16 .SH SYNOPSIS
17 .LP
18 .nf
19 \fBcc\fR [ \fIfilag\fR... ] \fIfile\fR... \fB-lnsl\fR [ \fIlibrary\fR... ]
20 #include <netdb.h>

22 \fBstruct hostent *\fR\fBggethostbyname\fR(\fBconst char *\fR\fIname\fR);
23 .fi

25 .LP
26 .nf
27 \fBstruct hostent *\fR\fBggethostbyname_r\fR(\fBconst char *\fR\fIname\fR,
28 \fBstruct hostent *\fR\fIresult\fR, \fBchar *\fR\fIbuffer\fR, \fBint\fR \fI
29 \fBint *\fR\fIh_errnop\fR);
30 .fi

32 .LP
33 .nf
34 \fBstruct hostent *\fR\fBggethostbyaddr\fR(\fBconst char *\fR\fIaddr\fR, \fBint\fR
35 \fBint\fR \fItype\fR);
36 .fi

38 .LP
39 .nf
40 \fBstruct hostent *\fR\fBggethostbyaddr_r\fR(\fBconst char *\fR\fIaddr\fR, \fBint
41 \fBint\fR \fItype\fR, \fBstruct hostent *\fR\fIresult\fR, \fBchar *\fR\fIbu
42 \fBint\fR \fIbuflen\fR, \fBint *\fR\fIh_errnop\fR);
43 .fi

45 .LP
46 .nf
47 \fBstruct hostent *\fR\fBggethostent\fR(\fBvoid\fR);
48 .fi

50 .LP
51 .nf
52 \fBstruct hostent *\fR\fBggethostent_r\fR(\fBstruct hostent *\fR\fIresult\fR,
53 \fBchar *\fR\fIbuffer\fR, \fBint\fR \fIbuflen\fR, \fBint *\fR\fIh_errnop\fR)
54 .fi

56 .LP
57 .nf
58 \fBint\fR \fBgsethostent\fR(\fBint\fR \fIstayopen\fR);
59 .fi

61 .LP
62 .nf
63 \fBint\fR \fBgendhostent\fR(\fBvoid\fR);
64 .fi

66 .SH DESCRIPTION
67 .sp
68 .LP
56 These functions are used to obtain entries describing hosts. An entry can come
57 from any of the sources for
58 .Sy hosts
59 specified in the
60 .Pa /etc/nsswitch.conf
61 file. See
62 .Xr nsswitch.conf 4 .
63 These functions have been superseded by
64 .Xr getipnodebyname 3SOCKET ,
65 .Xr getipnodebyaddr 3SOCKET ,
66 and
```

```

67 .Xr getaddrinfo 3SOCKET ,
68 which provide
69 from any of the sources for \fBhosts\fR specified in the
70 \fB/etc/nsswitch.conf\fR file. See \fBnsswitch.conf\fR(4). These functions have
71 been superseded by \fBgetipnodebyname\fR(3SOCKET),
72 \fBgetipnodebyaddr\fR(3SOCKET), and \fBgetaddrinfo\fR(3SOCKET), which provide
73 greater portability to applications when multithreading is performed or
74 technologies such as IPv6 are used. For example, the functions described in the
75 following cannot be used with applications targeted to work with IPv6.
76 .Lp
77 The
78 .Fn gethostbyname
79 function searches for information for a host with the
80 hostname specified by the character-string parameter
81 .Fa name .
82 .Lp
83 The
84 .Fn gethostbyaddr
85 function searches for information for a host with a
86 given host address. The parameter
87 .Fa type
88 specifies the family of the
89 .sp
90 .Lp
91 The \fBgethostbyname()\fR function searches for information for a host with the
92 hostname specified by the character-string parameter \fIname\fR.
93 .sp
94 .Lp
95 The \fBgethostbyaddr()\fR function searches for information for a host with a
96 given host address. The parameter \fBtype\fR specifies the family of the
97 address. This should be one of the address families defined in
98 \fIn sys/socket.h .
99 See the
100 .Sx NOTES
101 section for more information. Also
102 see the
103 .Sx EXAMPLES
104 section for information on how to convert an Internet
105 Protocol address notation that is separated by periods (.) into an
106 .Fa addr
107 parameter. The parameter
108 .Fa len
109 specifies the length of the buffer indicated
110 by
111 .Fa addr .
112 .Lp
113 \fB<sys/socket.h>\fR. See the \fBNOTES\fR section for more information. Also
114 see the \fBEXAMPLES\fR section for information on how to convert an Internet
115 \fBIP\fR address notation that is separated by periods (.) into an \fBIaddr\fR
116 parameter. The parameter \fBilen\fR specifies the length of the buffer indicated
117 by \fBIaddr\fR.
118 .sp
119 .Lp
120 All addresses are returned in network order. In order to interpret the
121 addresses,
122 .Xr byteorder 3SOCKET
123 must be used for byte order conversion.
124 .Ss "Reentrant Interfaces"
125 The
126 .Fn gethostbyname
127 and
128 .Fn gethostbyaddr
129 addresses, \fBbyteorder\fR(3SOCKET) must be used for byte order conversion.
130 .sp
131 .Lp
132 The \fBsethostent()\fR, \fBgethostent()\fR, and \fBendhostent()\fR functions

```

```

98 are used to enumerate host entries from the database.
99 .sp
100 .Lp
101 The \fBsethostent()\fR function sets or resets the enumeration to the beginning
102 of the set of host entries. This function should be called before the first
103 call to \fBgethostent()\fR. Calls to \fBgethostbyname()\fR and
104 \fBgethostbyaddr()\fR leave the enumeration position in an indeterminate state.
105 If the \fBistayopen\fR flag is non-zero, the system can keep allocated resources
106 such as open file descriptors until a subsequent call to \fBendhostent()\fR.
107 .sp
108 .Lp
109 Successive calls to the \fBgethostent()\fR function return either successive
110 entries or \fBNULL\fR, indicating the end of the enumeration.
111 .sp
112 .Lp
113 The \fBendhostent()\fR function can be called to indicate that the caller
114 expects to do no further host entry retrieval operations; the system can then
115 deallocate resources it was using. It is still allowed, but possibly less
116 efficient, for the process to call more host retrieval functions after calling
117 \fBendhostent()\fR.
118 .Ss "Reentrant Interfaces"
119 .sp
120 .Lp
121 The \fBgethostbyname()\fR, \fBgethostbyaddr()\fR, and \fBgethostent()\fR
122 functions use static storage that is reused in each call, making these
123 functions unsafe for use in multithreaded applications.
124 .Lp
125 The
126 .Fn gethostbyname_r
127 and
128 .Fn gethostbyaddr_r
129 .sp
130 .Lp
131 The \fBgethostbyname_r()\fR, \fBgethostbyaddr_r()\fR, and \fBgethostent_r()\fR
132 functions provide reentrant interfaces for these operations.
133 .Lp
134 .sp
135 .Lp
136 Each reentrant interface performs the same operation as its non-reentrant
137 counterpart, named by removing the
138 .Sy_r
139 suffix. The reentrant interfaces,
140 counterpart, named by removing the \fB_r\fR suffix. The reentrant interfaces,
141 however, use buffers supplied by the caller to store returned results and the
142 interfaces are safe for use in both single-threaded and multithreaded
143 applications.
144 .Lp
145 .sp
146 .Lp
147 Each reentrant interface takes the same parameters as its non-reentrant
148 counterpart, as well as the following additional parameters. The parameter
149 .Fa result
150 must be a pointer to a
151 .Vt "struct hostent"
152 structure allocated by
153 \fBresult\fR must be a pointer to a \fBstruct hostent\fR structure allocated by
154 the caller. On successful completion, the function returns the host entry in
155 this structure. The parameter
156 .Fa buffer
157 must be a pointer to a buffer
158 this structure. The parameter \fBibuffer\fR must be a pointer to a buffer
159 supplied by the caller. This buffer is used as storage space for the host data.
160 All of the pointers within the returned
161 .Vt "struct hostent"
162 point to data stored within this buffer. See the
163 .Sx RETURN VALUES

```

```

142 section for more
143 All of the pointers within the returned \fBstruct hostent\fR \fIresult\fR point
144 to data stored within this buffer. See the \fBRETURN VALUES\fR section for more
143 information. The buffer must be large enough to hold all of the data associated
144 with the host entry. The parameter
145 .Fa buflen
146 should give the size in bytes
147 of the buffer indicated by
148 .Fa buffer .
149 The parameter
150 .Fa h_errnop
151 should be
146 with the host entry. The parameter \fIbuflen\fR should give the size in bytes
147 of the buffer indicated by \fIbuffer\fR. The parameter \fIh_errnop\fR should be
152 a pointer to an integer. An integer error status value is stored there on
153 certain error conditions. See the
154 .Sx ERRORS
155 section for more information.
156 .Sh RETURN VALUES
157 Host entries are represented by the
158 .Vt "struct hostent"
159 structure defined in
160 .In netdb.h :
161 .Bd -literal -offset indent
149 certain error conditions. See the \fBERRORS\fR section for more information.
150 .sp
151 .LP
152 For enumeration in multithreaded applications, the position within the
153 enumeration is a process-wide property shared by all threads. The
154 \fBsethostent()\fR function can be used in a multithreaded application but
155 resets the enumeration position for all threads. If multiple threads interleave
156 calls to \fBgethostent_r()\fR, the threads will enumerate disjoint subsets of
157 the host database.
158 .sp
159 .LP
160 Like their non-reentrant counterparts, \fBgethostbyname_r()\fR and
161 \fBgethostbyaddr_r()\fR leave the enumeration position in an indeterminate
162 state.
163 .SH RETURN VALUES
164 .sp
165 .LP
166 Host entries are represented by the \fBstruct hostent\fR structure defined in
167 \fB<netdb.h>\fR:
168 .sp
169 .in +2
170 .nf
162 struct hostent {
163     char    *h_name;          /* canonical name of host */
164     char    **h_aliases;      /* alias list */
165     int     h_addrtype;       /* host address type */
166     int     h_length;         /* length of address */
167     char    **h_addr_list;    /* list of addresses */
168 };
169 .Ed
170 .LP
171 See the
172 .Sx EXAMPLES
173 section for information about how to retrieve a
174 .Sq \&.
175 separated Internet Protocol address string from the
176 .Fa h_addr_list
177 field of
178 .Vt "struct hostent" .
179 .LP
180 The
181 .Fn gethostbyname ,

```

```

182 .Fn gethostbyname_r ,
183 .Fn gethostbyaddr ,
184 and
185 .Fn gethostbyaddr_r
186 functions each return a pointer to a
187 .Vt "struct hostent"
188 if they successfully locate the requested entry; otherwise they
189 return
190 .Dv NULL .
191 .LP
192 The
193 .Fn gethostbyname
194 and
195 .Fn gethostbyaddr
178 .fi
179 .in -2

181 .sp
182 .LP
183 See the \fBEXAMPLES\fR section for information about how to retrieve a ``.''
184 separated Internet \fBIP\fR address string from the \fIh_addr_list\fR field of
185 \fBstruct hostent\fR.
186 .sp
187 .LP
188 The \fBgethostbyname()\fR, \fBgethostbyname_r()\fR, \fBgethostbyaddr()\fR, and
189 \fBgethostbyaddr_r()\fR functions each return a pointer to a \fBstruct
190 hostent\fR if they successfully locate the requested entry; otherwise they
191 return \fBNULL\fR.
192 .sp
193 .LP
194 The \fBgethostent()\fR and \fBgethostent_r()\fR functions each return a pointer
195 to a \fBstruct hostent\fR if they successfully enumerate an entry; otherwise
196 they return \fBNULL\fR, indicating the end of the enumeration.
197 .sp
198 .LP
199 The \fBgethostbyname()\fR, \fBgethostbyaddr()\fR, and \fBgethostent()\fR
196 functions use static storage, so returned data must be copied before a
197 subsequent call to any of these functions if the data is to be saved.
198 .LP
199 When the pointer returned by the reentrant functions
200 .Fn gethostbyname_r
201 and
202 .Fn gethostbyaddr_r
203 is not
204 .Dv NULL ,
205 it is always equal to the
206 .Fa result
207 pointer that was supplied by the caller.
208 .Sh FILES
209 .Bl -tag -width Pa
210 .It Pa /etc/hosts
211 hosts file that associates the names of hosts with their Internet Protocol (IP)
212 addresses
213 .It Pa /etc/nsswitch.conf
214 configuration file for the name service switch
215 .El
216 .Sh EXAMPLES
217 .Ss Example 1 Using gethostbyaddr()
202 .sp
203 .LP
204 When the pointer returned by the reentrant functions \fBgethostbyname_r()\fR,
205 \fBgethostbyaddr_r()\fR, and \fBgethostent_r()\fR is not \fBNULL\fR, it is
206 always equal to the \fIresult\fR pointer that was supplied by the caller.
207 .sp
208 .LP
209 The \fBsethostent()\fR and \fBendhostent()\fR functions return \fB0\fR on

```



```

210 success.
211 .SH ERRORS
212 .sp
213 .LP
214 The reentrant functions \fBgethostbyname_r()\fR, \fBgethostbyaddr_r()\fR, and
215 \fBgethostent_r()\fR will return \fR and set \fR to \fR, and
216 if the length of the buffer supplied by caller is not large enough to store the
217 result. See \fBIntro(2)\fR for the proper usage and interpretation of
218 \fBerrno\fR in multithreaded applications.
219 .sp
220 .LP
221 The reentrant functions \fBgethostbyname_r()\fR and \fBgethostbyaddr_r()\fR set
222 the integer pointed to by \fBh_errnop\fR to one of these values in case of
223 error.
224 .sp
225 .LP
226 On failures, the non-reentrant functions \fBgethostbyname()\fR and
227 \fBgethostbyaddr()\fR set a global integer \fBh_errno\fR to indicate one of
228 these error codes (defined in \fB<netdb.h>\fR): \fBHOST_NOT_FOUND\fR,
229 \fBTRY_AGAIN\fR, \fBNO_RECOVERY\fR, \fBNO_DATA\fR, and \fBNO_ADDRESS\fR.
230 .sp
231 .LP
232 If a resolver is provided with a malformed address, or if any other error
233 occurs before \fBgethostbyname()\fR is resolved, then \fBgethostbyname()\fR
234 returns an internal error with a value of \fR.
235 .sp
236 .LP
237 The \fBgethostbyname()\fR function will set \fBh_errno\fR to
238 \fBNETDB_INTERNAL\fR when it returns a \fR value.
239 .SH EXAMPLES
240 .LP
241 \fBExample 1 \fRUsing \fBgethostbyaddr()\fR
242 .sp
243 .LP
244 Here is a sample program that gets the canonical name, aliases, and ``''
245 separated Internet Protocol addresses for a given ``'' separated IP
246 separated Internet \fBIP\fR addresses for a given ``'' separated \fBIP\fR
247 address:
248 .bD -literal -offset indent
249
250 .sp
251 .in +2
252 .nf
253 #include <stdio.h>
254 #include <stdlib.h>
255 #include <string.h>
256 #include <sys/types.h>
257 #include <sys/socket.h>
258 #include <netinet/in.h>
259 #include <arpa/inet.h>
260 #include <netdb.h>
261 int main(int argc, const char **argv)
262 {
263     in_addr_t addr;
264     struct hostent *hp;
265     char **p;
266     if (argc != 2) {
267         (void) printf("usage: %s IP-address\n", argv[0]);
268         exit (1);
269     }
270     if ((int)(addr = inet_addr(argv[1])) == -1) {
271         (void) printf("IP-address must be of form a.b.c.d\n");
272         (void) printf("IP-address must be of the form a.b.c.d\n");
273         exit (2);
274     }
275     hp = gethostbyaddr((char *)&addr, 4, AF_INET);

```

```

244     if (hp == NULL) {
245         (void) printf("host %s not found\n", argv[1]);
246         (void) printf("host information for %s not found\n", argv[1]);
247         exit (3);
248     }
249     for (p = hp->h_addr_list; *p != 0; p++) {
250         struct in_addr in;
251         char **q;
252         (void) memcpy(&in.s_addr, *p, sizeof (in.s_addr));
253         (void) printf("%s\t%s", inet_ntoa(in), hp->h_name);
254         for (q = hp->h_aliases; *q != 0; q++)
255             (void) printf(" %s", *q);
256         (void) putchar('\n');
257     }
258     exit (0);
259 }
260 .Ed
261 .LP
262 .fi
263 .in -2
264
265 .sp
266 .LP
267 Note that the preceding sample program is unsafe for use in multithreaded
268 applications.
269 .SH ERRORS
270 The reentrant functions
271 .Fn gethostbyname_r
272 and
273 .Fn gethostbyaddr_r
274 will return
275 .Dv NULL
276 and set
277 .Va errno
278 to
279 .Er ERANGE
280 if the length of the buffer supplied by caller is not large enough to store the
281 result. See
282 .Xr Intro 2
283 for the proper usage and interpretation of
284 .Va errno
285 in multithreaded applications.
286 .LP
287 The reentrant functions
288 .Fn gethostbyname_r
289 and
290 .Fn gethostbyaddr_r
291 set the integer pointed to by
292 .Fa h_errnop
293 to one of these values in case of error.
294 .LP
295 On failures, the non-reentrant functions
296 .Fn gethostbyname
297 and
298 .Fn gethostbyaddr
299 set a global integer
300 .Va h_errno
301 to indicate one of
302 these error codes
303 .Po defined in
304 .In netdb.h Pc :
305 .Dv HOST_NOT_FOUND ,
306 .Dv TRY_AGAIN ,
307 .Dv NO_RECOVERY ,
308 .Dv NO_DATA ,
309 and

```

```

304 .Dv NO_ADDRESS .
305 .Lp
306 If a resolver is provided with a malformed address, or if any other error
307 occurs before
308 .Fn gethostbyname
309 is resolved, then
310 .Fn gethostbyname
311 returns an internal error with a value of \(\mil.
312 .Lp
313 The
314 .Fn gethostbyname
315 function will set
316 .Va h_errno
317 to
318 .Dv NETDB_INTERNAL
319 when it returns a
320 .Dv NULL
321 value.
322 .Sh INTERFACE STABILITY
323 The
324 .Fn gethostbyname
325 and
326 .Fn gethostbyaddr
327 functions are
328 .Sy Obsolete Standard .
329 .Lp
330 The
331 .Fn gethostbyname_r
332 and
333 .Fn gethostbyaddr_r
334 functions are
335 .Sy Obsolete Uncommitted .
336 .Sh MT-LEVEL
337 The
338 .Fn gethostbyname
339 and
340 .Fn gethostbyaddr
341 functions are
342 .Sy Unsafe .
343 .Lp
344 The
345 .Fn gethostbyname_r
346 and
347 .Fn gethostbyaddr_r
348 functions are
349 .Sy Safe .
350 .Sh SEE ALSO
351 .Xr Intro 2 ,
352 .Xr netdb.h 3HEAD ,
353 .Xr netdir 3NSL ,
354 .Xr byteorder 3SOCKET ,
355 .Xr getaddrinfo 3SOCKET
356 .Xr getnameinfo 3SOCKET
357 .Xr inet 3SOCKET ,
358 .Xr hosts 4 ,
359 .Xr nss 4 ,
360 .Xr nsswitch.conf 4 ,
361 .Xr standards 5
362 .Sh NOTES
363 The reentrant interfaces
364 .Fn gethostbyname_r
365 and
366 .Fn gethostbyaddr_r
367 are included in this release on an uncommitted basis only
368
369 .Sh FILES

```

```

297 .sp
298 .ne 2
299 .na
300 \fB\fB/etc/hosts\fR\fR
301 .ad
302 .RS 22n
303 hosts file that associates the names of hosts with their Internet Protocol (IP)
304 addresses
305 .RE

307 .sp
308 .ne 2
309 .na
310 \fB\fB/etc/netconfig\fR\fR
311 .ad
312 .RS 22n
313 network configuration database
314 .RE

316 .sp
317 .ne 2
318 .na
319 \fB\fB/etc/nsswitch.conf\fR\fR
320 .ad
321 .RS 22n
322 configuration file for the name service switch
323 .RE

325 .SH ATTRIBUTES
326 .sp
327 .LP
328 See \fBAttributes\fR(5) for descriptions of the following attributes:
329 .sp

331 .sp
332 .TS
333 box;
334 c | c
335 l | l .
336 ATTRIBUTE TYPE    ATTRIBUTE VALUE
337 _
338 MT-Level          T{
339 See \fBREentrant Interfaces\fR in the \fBDESCRIPTION\fR section.
340 T}
341 .TE

343 .SH SEE ALSO
344 .sp
345 .LP
346 \fBIntro\fR(2), \fBIntro\fR(3), \fBByteorder\fR(3SOCKET), \fBInet\fR(3SOCKET),
347 \fBNetdb.h\fR(3HEAD), \fBNetdir\fR(3NSL), \fBHosts\fR(4), \fBNetconfig\fR(4),
348 \fBNss\fR(4), \fBNsswitch.conf\fR(4), \fBAttributes\fR(5)
349 .SH WARNINGS
350 .sp
351 .LP
352 The reentrant interfaces \fBgethostbyname_r()\fR, \fBgethostbyaddr_r()\fR, and
353 \fBgethostent_r()\fR are included in this release on an uncommitted basis only
354 and are subject to change or removal in future minor releases.
355 .Lp
356 To ensure that they all return consistent results,
357 .Fn gethostbyname ,
358 .Fn gethostbyname_r ,
359 and
360 .Xr netdir_getbyname 3NSL
361 are implemented in terms
362 .Sh NOTES

```

```

356 .sp
357 .LP
358 To ensure that they all return consistent results, \fBgethostbyname()\fR,
359 \fBgethostbyname_r()\fR, and \fBnetdir_getbyname()\fR are implemented in terms
376 of the same internal library function. This function obtains the system-wide
377 source lookup policy based on the
378 .Sy hosts:
379 entry in
380 .Xr nsswitch.conf 4 .
381 Similarly,
382 .Fn gethostbyaddr ,
383 .Fn gethostbyaddr_r ,
384 and
385 .Xr netdir_getbyaddr 3NSL
386 are implemented in terms of the same internal library
387 function, which also is driven by the
388 .Sy hosts:
389 entry in
390 .Xr nsswitch.conf 4 .
391 .Lp
392 These functions must always return the
393 .Em canonical name
394 in the
395 .Fa h_name
396 field. This name, by definition, is
397 source lookup policy based on the \fBinet\fR family entries in
398 \fBnetconfig\fR(4) and the \fBhosts:\fR entry in \fBnsswitch.conf\fR(4).
399 Similarly, \fBgethostbyaddr()\fR, \fBgethostbyaddr_r()\fR, and
400 \fBnetdir_getbyaddr()\fR are implemented in terms of the same internal library
401 function. If the \fBinet\fR family entries in \fBnetconfig\fR(4) have a '-'
402 in the last column for \fBnametoaddr\fR libraries, then the entry for
403 \fBhosts\fR in \fBnsswitch.conf\fR will be used; \fBnametoaddr\fR libraries in
404 that column will be used, and \fBnsswitch.conf\fR will not be consulted.
405 .sp
406 .LP
407 There is no analogue of \fBgethostent()\fR and \fBgethostent_r()\fR in the
408 netdir functions, so these enumeration functions go straight to the \fBhosts\fR
409 entry in \fBnsswitch.conf\fR. Thus enumeration can return results from a
410 different source than that used by \fBgethostbyname()\fR,
411 \fBgethostbyname_r()\fR, \fBgethostbyaddr()\fR, and \fBgethostbyaddr_r()\fR.
412 .sp
413 .LP
414 All the functions that return a \fBstruct hostent\fR must always return the
415 \fBicanonical name\fR in the \fBih_name\fR field. This name, by definition, is
416 the well-known and official hostname shared between all aliases and all
417 addresses. The underlying source that satisfies the request determines the
418 mapping of the input name or address into the set of names and addresses in
419 .Fa hostent .
420 Different sources might do that in different ways. If there is
421 more than one alias and more than one address in
422 .Fa hostent ,
423 no pairing is
424 \fBhostent\fR. Different sources might do that in different ways. If there is
425 more than one alias and more than one address in \fBhostent\fR, no pairing is
426 implied between them.
427 .Lp
428 .sp
429 .LP
430 The system attempts to put those addresses that are on the same subnet as the
431 caller before addresses that are on different subnets. However, if address
432 sorting is disabled by setting
433 .Sy SORT_ADDRS
434 to
435 .Sy FALSE
436 in the
437 .Pa /etc/default/nss

```

```

435 file, the system does not put the local subnet addresses
436 first. See
437 .Xr nss 4
438 for more information.
439 .Lp
440 sorting is disabled by setting \fBSORT_ADDRS\fR to FALSE in the
441 \fB/etc/default/nss\fR file, the system does not put the local subnet addresses
442 first. See \fBnss\fR(4) for more information.
443 .sp
444 .LP
445 When compiling multithreaded applications, see \fBIntro\fR(3), \fBMULTITHREADED
446 APPLICATIONS\fR, for information about the use of the \fB_REENTRANT\fR flag.
447 .sp
448 .LP
449 Use of the enumeration interfaces \fBgethostent()\fR and \fBgethostent_r()\fR
450 is discouraged; enumeration might not be supported for all database sources.
451 The semantics of enumeration are discussed further in \fBnsswitch.conf\fR(4).
452 .sp
453 .LP
454 The current implementations of these functions only return or accept addresses
455 for the Internet address family
456 .Po type Dv AF_INET Pc .
457 .Lp
458 The form for an address of type
459 .Dv AF_INET
460 is a
461 .Vt "struct in_addr"
462 defined
463 .In netinet/in.h .
464 The functions described in
465 .Xr inet 3SOCKET ,
466 and illustrated in the
467 .Sx EXAMPLES
468 section, are helpful in constructing and
469 for the Internet address family (type \fBAF_INET\fR).
470 .sp
471 .LP
472 The form for an address of type \fBAF_INET\fR is a \fBstruct in_addr\fR defined
473 in <\fBnetinet/in.h\fR>. The functions described in \fBinet\fR(3SOCKET), and
474 illustrated in the \fBEXAMPLES\fR section, are helpful in constructing and
475 manipulating addresses in this form.
476 .Sh STANDARDS
477 The
478 .Fn gethostbyaddr
479 and
480 .Fn gethostbyname
481 functions were introduced in
482 .Bx 4.2 ,
483 and standardized in
484 .St -xns5.2
485 and
486 .St -p1003.1-2001 .
487 They were subsequently removed from
488 .St -p1003.1-2008 .

```

new/usr/src/man/man3nsl/gethostent.3nsl

1

8890 Sun Jul 27 18:01:36 2014
new/usr/src/man/man3nsl/gethostent.3nsl
Finished obsoleting interfaces for XPG7.

```
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12.Dd Jul 22, 2014
13.Dt GETHOSTBYNAME 3NSL
14.Os
15.Sh NAME
16.Nm gethostent, gethostent_r, sethostent, endhostent
17.Nd enumerate network host entries
18.Sh SYNOPSIS
19.Ic cc
20.Op Ar flag No Ns ...
21.Ar file No Ns ...
22.Fl lns1
23.Op Ar library No Ns ...
24.Lp
25.In netdb.h
26.Ft "struct hostent *"
27.Fn gethostent "void"
28.Ft "struct hostent *"
29.Fo gethostent_r
30.Fa "struct hostent *result"
31.Fa "char *buffer"
32.Fa "int buflen"
33.Fa "int *h_errnop"
34.Fc
35.Ft int
36.Fn sethostent "int stayopen"
37.Ft int
38.Fn endhostent void
39.Sh DESCRIPTION
40.These functions are used to enumerate entries in the network hosts database.
41.An entries can come
42.from any of the sources for
43.Sy hosts
44.specified in the
45.Pa /etc/nsswitch.conf
46.file. See
47.Xr nsswitch.conf 4 .
48.Lp
49.All addresses are returned in network order. In order to interpret the
50.addresses,
51.Xr byteorder 3SOCKET
52.must be used for byte order conversion.
53.Lp
54.The
55.Fn sethostent
56.function sets or resets the enumeration to the beginning
57.of the set of host entries. This function should be called before the first
58.call to
59.Fn gethostent .
60.If the
61.Fa stayopen
```

new/usr/src/man/man3nsl/gethostent.3nsl

2

```
62 flag is non-zero, the system can keep allocated resources
63 such as open file descriptors until a subsequent call to
64 .Fn endhostent .
65 .Lp
66 Successive calls to the
67 .Fn gethostent
68 function return either successive
69 entries or
70 .Dv NULL ,
71 indicating the end of the enumeration.
72 .Lp
73 The
74 .Fn endhostent()
75 function can be called to indicate that the caller
76 expects to do no further host entry retrieval operations; the system can then
77 deallocate resources it was using. It is still allowed, but possibly less
78 efficient, for the process to call more host retrieval functions after calling
79 .Fn endhostent .
80 .Lp
81 The
82 .Fn gethostent
83 function uses static storage that is reused in each call, making this
84 function unsafe for use in multithreaded applications.
85 .Lp
86 The
87 .Fn gethostent_r
88 function performs the same function as
89 .Fn gethostent, but provides a reentrant interface.
90 It uses a buffer supplied by the caller to store returned results and
91 is safe for use in both single-threaded and multithreaded applications.
92 .Lp
93 The
94 .Fn gethostent_r
95 function takes the same parameters as
96 .Fn gethostent ,
97 as well as the following additional parameters. The parameter
98 .Fa result
99 must be a pointer to a
100 .Vt "struct hostent"
101 structure allocated by the caller. On successful completion, the function
102 returns the host entry in
103 this structure. The parameter
104 .Fa buffer
105 must be a pointer to a buffer
106 supplied by the caller. This buffer is used as storage space for the host data.
107 All of the pointers within the returned
108 .Vt "struct hostent"
109 point to data stored within this buffer. See the
110 .Sx RETURN VALUES
111 section for more
112 information. The buffer must be large enough to hold all of the data associated
113 with the host entry. The parameter
114 .Fa buflen
115 should give the size in bytes
116 of the buffer indicated by
117 .Fa buffer . The parameter
118 .Fa h_errnop
119 should be
120 a pointer to an integer. An integer error status value is stored there on
121 certain error conditions. See the
122 .Sx ERRORS
123 section for more information.
124 .Sh RETURN VALUES
125 The
126 .Fn gethostent
127 and
```

```

128 .Fn gethostent_r
129 functions each return a pointer
130 to a
131 .Vt "struct hostent"
132 if they successfully enumerate an entry; otherwise they return
133 .Dv NULL ,
134 indicating the end of the enumeration. See
135 .Xr gethostbyname 3NSL
136 for a description of the
137 .Vt "struct hostent"
138 structure.
139 .Lp
140 The
141 .Fn gethostent
142 function uses static storage, so results from one call may be overwritten
143 by subsequent calls it.
144 .Lp
145 When the pointer returned by
146 .Fn gethostent_r
147 is not
148 .Dv NULL , it is
149 always equal to the
150 .Fa result
151 pointer that was supplied by the caller.
152 .Lp
153 The
154 .Fn sethostent
155 and
156 .Fn endhostent
157 functions return 0 on success.
158 .Sh FILES
159 .Bl -tag -width "/etc/nsswitch.conf"
160 .It Pa /etc/hosts
161 hosts file that associates the names of hosts with their Internet Protocol (IP)
162 addresses
163 .It Pa /etc/nsswitch.conf
164 configuration file for the name service switch
165 .El
166 .Sh ERRORS
167 The
168 .Fn gethostent_r
169 function will return
170 .Dv NULL
171 and set
172 .Va errno
173 to
174 .Er ERANGE
175 if the length of the buffer supplied by caller is not large enough to store the
176 result. It may also store one of the following
177 .Va h_errno
178 values into the location pointed by
179 .Fa h_errnop . On error, the
180 .Fn gethostent
181 function will set the global
182 .Va h_errno
183 value to one of these values:
184 .Dv HOST_NOT_FOUND ,
185 .Dv TRY_AGAIN ,
186 .Dv NO_RECOVERY ,
187 .Dv NO_DATA ,
188 .Dv NO_ADDRESS ,
189 or
190 .Dv NETDB_INTERNAL .
191 .Sh INTERFACE STABILITY
192 The
193 .Fn gethostent ,

```

```

194 .Fn sethostent ,
195 and
196 .Fn endhostent
197 functions are
198 .Sy Standard .
199 The
200 .Fn gethostent_r
201 function is
202 .Sy Obsolete Uncommitted .
203 .Sh MT-LEVEL
204 The
205 .Fn gethostent
206 function is
207 .Sy Unsafe .
208 .Lp
209 The
210 .Fn gethostent_r ,
211 .Fn sethostent ,
212 and
213 .Fn endhostent
214 functions are
215 .Sy Safe with Exceptions .
216 For enumeration in multithreaded applications, the position within the
217 enumeration is a process-wide property shared by all threads.
218 If multiple threads interleave
219 calls to these functions,
220 the threads will enumerate disjoint subsets of the host database.
221 .Sh SEE ALSO
222 .Xr byteorder 3SOCKET ,
223 .Xr gethostbyname 3NSL ,
224 .Xr netdb.h 3HEAD ,
225 .Xr hosts 4 ,
226 .Xr nss 4 ,
227 .Xr nsswitch.conf 4 ,
228 .Xr standards 5
229 .Sh NOTES
230 The
231 .Fn gethostent_r
232 function is provided as an
233 .Sy Uncommitted
234 interface, and is subject to removal or change in a subsequent release.
235 .Lp
236 The
237 .Fn gethostent
238 and
239 .Fn gethostent_r
240 functions must always return the
241 .Em canonical name
242 in the
243 .Fa h_name
244 field. This name, by definition, is
245 the well-known and official hostname shared between all aliases and all
246 addresses. The underlying source that satisfies the request determines the
247 mapping of the input name or address into the set of names and addresses in
248 .Fa hostent .
249 Different sources might do that in different ways. If there is
250 more than one alias and more than one address in
251 .Fa hostent ,
252 no pairing is implied between them.
253 .Lp
254 The system attempts to put those addresses that are on the same subnet as the
255 caller before addresses that are on different subnets. However, if address
256 sorting is disabled by setting
257 .Sy SORT_ADDR
258 to
259 .Sy FALSE

```

```
260 in the
261 .Pa /etc/default/nss
262 file, the system does not put the local subnet addresses
263 first. See
264 .Xr nss 4
265 for more information.
266 .Lp
267 Use of these enumeration functions
268 is discouraged; enumeration might not be supported for all database sources.
269 The semantics of enumeration are discussed further in
270 .Xr nsswitch.conf 4 .
271 .Lp
272 The current implementations of these functions only return addresses
273 for the Internet address family
274 .Po type Dv AF_INET Pc .
275 See
276 .Xr inet 4
277 for more information.
278 .Sh STANDARDS
279 The
280 .Fn gethostent ,
281 .Fn sethostent ,
282 and
283 .Fn endhostent
284 functions were introduced in
285 .Bx 4.2
286 and standardized in
287 .St -xns5.2 and
288 .St -p1003.1-2001 .
```

8753 Sun Jul 27 18:01:36 2014

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

Minor markup tweaks (Sy instead of Nm).

```

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6 .Dd "Jul 19, 2014"
7 .Dt MAN 5
8 .Os
9 .Sh NAME
10 .Nm man
11 .Nd macros to format Reference Manual pages
12 .Sh SYNOPSIS
13 .Nm mandoc
14 .Fl T Ar man
15 .Ar
16 .Nm nroff
17 .Fl man
18 .Ar
19 .Nm troff
20 .Fl man
21 .Ar
22 .Sh DESCRIPTION
23 These macros are used to lay out the reference pages in this manual. Note: if
24 .Ar file
25 contains format input for a preprocessor, the commands shown
26 above must be piped through the appropriate preprocessor. This is handled
27 automatically by the
28 .Xr man 1
29 command. See the
30 .Sx Conventions
31 section.
32 .Lp
33 Any text argument
34 .Ar t
35 may be zero to six words. Quotes may be used to
36 include SPACE characters in a
37 .Qq word .
38 If
39 .Ar text
40 is empty, the special
41 treatment is applied to the next input line with text to be printed. In this
42 way
43 .Nm \&.I
44 may be used to italicize a whole line, or
45 .Nm \&.SB
46 may be used to make small bold letters.
47 .Lp
48 A prevailing indent distance is remembered between successive indented
49 paragraphs, and is reset to default value upon reaching a non-indented
50 paragraph. Default units for indents
51 .Nm i
52 are ens.
53 .Lp
54 Type font and size are reset to default values before each paragraph, and after
55 processing font and size setting macros.
56 .Pp
57 These strings are predefined by
58 .Nm -man :
59 .Bl -tag -width Ds
60 .It Nm \e*R
61 .Sq \(\rg ,

```

```

62 .Sq (Reg)
63 in
64 .Nm nroff .
65 .It Nm \e*S
66 Change to default type size.
67 .El
68 .Sh "Requests"
69 * n.t.l. = next text line; p.i. = prevailing indent
70 .Bl -column ".TH n s d f m" "Cause " "t=n.t.l.*" "Explanation " -offset Ds
71 .It Sy Request Sy Cause Sy "If No" Sy Explanation
72 .It " " Sy Break Sy "Argument" " "
73 .It Nm \&.B Ar "t" no Ar t Ns =n.t.l.* Text is in bold font.
74 .It Nm \&.BI Ar t no Ar t Ns =n.t.l. Join words, alternating bold and
75 .It Nm \&.BR Ar t no Ar t Ns =n.t.l. Join words, alternating bold and
76 .It Nm \&.DT no Li \&.5i li... Restore default tabs.
77 .It Nm \&.HP Ar i yes Ar i Ns =p.i.* "Begin paragraph with hanging in
78 .It Nm \&.I Ar t no Ar t Ns =n.t.l. Text is italic.
79 .It Nm \&.IB Ar t no Ar t Ns =n.t.l. Join words, alternating italic a
80 .It Nm \&.IP Ar x Ar i yes Ar x Ns ="" Same as
81 .Nm \&.TP
82 with tag
83 .Ar x .
84 .It Nm \&.IR Ar t no Ar t Ns =n.t.l. Join words, alternating italic a
85 .It Nm \&.IX Ar t no - Index macro, not used (obsolete).
86 .It Nm \&.LP yes - Begin left-aligned paragraph. Set prevailing ind
87 .It Nm \&.P yes - Same as
88 .Nm \&.LP .
89 .It Nm \&.PD Ar d no Ar d Ns =.4v Set vertical distance between pa
90 .It Nm \&.PP yes - Same as
91 .Nm \&.LP .
92 .It Nm \&.RE yes - End of relative indent. Restores prevailing inde
93 .It Nm \&.RB Ar t no Ar t Ns =n.t.l. Join words, alternating roman an
94 .It Nm \&.RI Ar t no Ar t Ns =n.t.l. Join words, alternating roman an
95 .It Nm \&.RS Ar i yes Ar i Ns =p.i. Start relative indent, increase
96 Sets prevailing indent to .5i for nested indents.
97 .It Nm \&.SB Ar t no - Reduce size of text by 1 point, make tex
98 .It Nm \&.SH Ar t yes - Section Heading.
99 .It Nm \&.SM Ar t no Ar t Ns =n.t.l. Reduce size of text by 1 point.
100 .It Nm \&.SS Ar t yes Ar t Ns =n.t.l. Section Subheading.
101 .It Nm \&.TH Ar n s d f m yes - Begin reference page Ar n , No o
102 .It Nm \&.TP Ar i yes Ar i Ns =p.i. Begin indented paragraph, with t
103 .Ar i .
104 .It Nm \&.TX Ar t p no - Resolve the title abbreviation Ar t ; No
105 .El
106 .Ss "Conventions"
107 When formatting a manual page,
108 .Nm
109 examines the first line to determine
110 whether it requires special processing. For example a first line consisting of:
111 .Lp
112 .Dl \&'\" t
113 .Lp
114 indicates that the manual page must be run through the
115 .Xr tbl 1
116 preprocessor.
117 .Lp
118 A typical manual page for a command or function is laid out as follows:
119 .Bl -tag -width ".SH RETURN VALUES"
120 .
121 .It Nm \&.TH Ar title Op "1-9"
122 .
123 The name of the command or function, which serves as the title of the manual
124 page. This is followed by the number of the section in which it appears.
125 .
126 .It Nm SH NAME
127 .

```

```

128 The name, or list of names, by which the command is called, followed by a dash
129 and then a one-line summary of the action performed. All in roman font, this
130 section contains no
131 .Xr troff 1
132 commands or escapes, and no macro requests.
133 It is used to generate the database used by the
134 .Xr whatis 1
135 command.
136 .
137 .It Nm SH SYNOPSIS
138 .Bl -tag -width "Functions:"
139 .It Sy Commands:
140 The syntax of the command and its arguments, as typed on the command line.
141 When in boldface, a word must be typed exactly as printed. When in italics, a
142 word can be replaced with an argument that you supply. References to bold or
143 italicized items are not capitalized in other sections, even when they begin a
144 sentence.
145 .Lp
146 Syntactic symbols appear in roman face:
147 .Bl -tag -width " "
148 .It Op " "
149 An argument, when surrounded by brackets is optional.
150 .It |
151 Arguments separated by a vertical bar are exclusive. You can supply only one
152 item from such a list.
153 .It \&.\|.\|.
154 Arguments followed by an ellipsis can be repeated. When an ellipsis follows a
155 bracketed set, the expression within the brackets can be repeated.
156 .El
157 .It Sy Functions:
158 If required, the data declaration, or
159 .Li #include
160 directive, is shown first,
161 followed by the function declaration. Otherwise, the function declaration is
162 shown.
163 .El
164 .
165 .It Nm \&.SH DESCRIPTION
166 .
167 A narrative overview of the command or function's external behavior. This
168 includes how it interacts with files or data, and how it handles the standard
169 input, standard output and standard error. Internals and implementation details
170 are normally omitted. This section attempts to provide a succinct overview in
171 answer to the question, "what does it do?"
172 .Lp
173 Literal text from the synopsis appears in constant width, as do literal
174 filenames and references to items that appear elsewhere in the reference
175 manuals. Arguments are italicized.
176 .Lp
177 If a command interprets either subcommands or an input grammar, its command
178 interface or input grammar is normally described in a
179 .Nm USAGE
180 section, which follows the
181 .Nm OPTIONS
182 section. The
183 .Nm DESCRIPTION
184 section only
185 describes the behavior of the command itself, not that of subcommands.
186 .
187 .It Nm \&.SH OPTIONS
188 .
189 The list of options along with a description of how each affects the command's
190 operation.
191 .
192 .It Nm \&.SH RETURN VALUES
193 .

```

```

194 A list of the values the library routine will return to the calling program
195 and the conditions that cause these values to be returned.
196 .
197 .It Nm \&.SH EXIT STATUS
198 .
199 A list of the values the utility will return to the calling program or shell,
200 and the conditions that cause these values to be returned.
201 .
202 .It Nm \&.SH FILES
203 .
204 A list of files associated with the command or function.
205 .
206 .It Nm \&.SH SEE ALSO
207 .
208 A comma-separated list of related manual pages, followed by references to other
209 published materials.
210 .
211 .It Nm \&.SH DIAGNOSTICS
212 .
213 A list of diagnostic messages and an explanation of each.
214 .
215 .It Nm \&.SH BUGS
216 .
217 A description of limitations, known defects, and possible problems associated
218 with the command or function.
219 .El
220 .Sh FILES
221 .Pa /usr/share/man/whatis
222 .Sh NOTES
223 The
224 .Nm
225 package should not be used for new documentation. The
226 .Xr mdoc 5 ,
227 package is preferred, as it uses semantic markup rather than physical markup.
228 .Sh CODE SET INDEPENDENCE
229 When processed with
230 .Xr mandoc 1 ,
231 this package is Code Set Independent. However, when processed with
232 legacy tools such as
233 .Xr nroff 1
234 and
235 .Xr troff 1 ,
236 the use of multi-byte characters may not be supported.
237 .Sh INTERFACE STABILITY
238 .Sy Obsolete Committed .
238 .Nm Obsolete Committed .
239 The
240 .Xr mdoc 5
241 package should be used instead.
242 .Sh SEE ALSO
243 .Xr eqn 1 ,
244 .Xr man 1 ,
245 .Xr mandoc 1 ,
246 .Xr nroff 1 ,
247 .Xr troff 1 ,
248 .Xr tbl 1 ,
249 .Xr whatis 1 ,
250 .Xr mdoc 5 ,
251 .Rs
252 .%A Dale Dougherty and Tim O'Reilly
253 .%B Unix Text Processing
254 .Re

```

75905 Sun Jul 27 18:01:36 2014

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

Minor markup tweaks (Sy instead of Nm).

```

1 .\"
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19 .\"
20 .Dd Jul 19, 2014
21 .Dt MDOC 5
22 .Os
23 .Sh NAME
24 .Nm mdoc
25 .Nd semantic markup language for formatting manual pages
26 .Sh DESCRIPTION
27 The
28 .Nm mdoc
29 language supports authoring of manual pages for the
30 .Xr man 1
31 utility by allowing semantic annotations of words, phrases,
32 page sections and complete manual pages.
33 Such annotations are used by formatting tools to achieve a uniform
34 presentation across all manuals written in
35 .Nm ,
36 and to support hyperlinking if supported by the output medium.
37 .Pp
38 This reference document describes the structure of manual pages
39 and the syntax and usage of the
40 .Nm
41 language.
42 The reference implementation of a parsing and formatting tool is
43 .Xr mandoc 1 ;
44 the
45 .Sx COMPATIBILITY
46 section describes compatibility with other implementations.
47 .Pp
48 In an
49 .Nm
50 document, lines beginning with the control character
51 .Sq \&.
52 are called
53 .Dq macro lines .
54 The first word is the macro name.
55 It consists of two or three letters.
56 Most macro names begin with a capital letter.
57 For a list of available macros, see
58 .Sx MACRO OVERVIEW .
59 The words following the macro name are arguments to the macro, optionally
60 including the names of other, callable macros; see
61 .Sx MACRO SYNTAX

```

```

62 for details.
63 .Pp
64 Lines not beginning with the control character are called
65 .Dq text lines .
66 They provide free-form text to be printed; the formatting of the text
67 depends on the respective processing context:
68 .Bd -literal -offset indent
69 \&.Sh Macro lines change control state.
70 Text lines are interpreted within the current state.
71 .Ed
72 .Pp
73 Many aspects of the basic syntax of the
74 .Nm
75 language are based on the
76 .Xr roff 5
77 language; see the
78 .Em LANGUAGE SYNTAX
79 and
80 .Em MACRO SYNTAX
81 sections in the
82 .Xr roff 5
83 manual for details, in particular regarding
84 comments, escape sequences, whitespace, and quoting.
85 However, using
86 .Xr roff 5
87 requests in
88 .Nm
89 documents is discouraged;
90 .Xr mandoc 1
91 supports some of them merely for backward compatibility.
92 .Sh MANUAL STRUCTURE
93 A well-formed
94 .Nm
95 document consists of a document prologue followed by one or more
96 sections.
97 .Pp
98 The prologue, which consists of the
99 .Sx \&Dd ,
100 .Sx \&Dt ,
101 and
102 .Sx \&Os
103 macros in that order, is required for every document.
104 .Pp
105 The first section (sections are denoted by
106 .Sx \&Sh )
107 must be the NAME section, consisting of at least one
108 .Sx \&Nm
109 followed by
110 .Sx \&Nd .
111 .Pp
112 Following that, convention dictates specifying at least the
113 .Em SYNOPSIS
114 and
115 .Em DESCRIPTION
116 sections, although this varies between manual sections.
117 .Pp
118 The following is a well-formed skeleton
119 .Nm
120 file for a utility
121 .Qq progname :
122 .Bd -literal -offset indent
123 \&.Dd Jan 1, 1970
124 \&.Dt PROGNAME section
125 \&.Os
126 \&.Sh NAME
127 \&.Nm progname

```

```

128 \&.Nd one line description
129 \&.\e\(\dq .Sh LIBRARY
130 \&.\e\(\dq For sections 2, 3, & 9 only.
131 \&.Sh SYNOPSIS
132 \&.Nm progname
133 \&.Op Fl options
134 \&.Ar
135 \&.Sh DESCRIPTION
136 The
137 \&.Nm
138 utility processes files ...
139 \&.\e\(\dq .Sh IMPLEMENTATION NOTES
140 \&.\e\(\dq .Sh RETURN VALUES
141 \&.\e\(\dq For sections 2, 3, & 9 only.
142 \&.\e\(\dq .Sh ENVIRONMENT
143 \&.\e\(\dq For sections 1, 1M, and 5.
144 \&.\e\(\dq .Sh FILES
145 \&.\e\(\dq .Sh EXIT STATUS
146 \&.\e\(\dq For sections 1, 1M, and 5.
147 \&.\e\(\dq .Sh EXAMPLES
148 \&.\e\(\dq .Sh DIAGNOSTICS
149 \&.\e\(\dq .Sh ERRORS
150 \&.\e\(\dq For sections 2, 3, & 9 only.
151 \&.\e\(\dq .Sh ARCHITECTURE
152 \&.\e\(\dq .Sh CODE SET INDEPENDENCE
153 \&.\e\(\dq For sections 1, 1M, & 3 only.
154 \&.\e\(\dq .Sh INTERFACE STABILITY
155 \&.\e\(\dq .Sh MT-LEVEL
156 \&.\e\(\dq For sections 2 & 3 only.
157 \&.\e\(\dq .Sh SECURITY
158 \&.\e\(\dq .Sh SEE ALSO
159 \&.\e\(\dq .Xr foobar 1
160 \&.\e\(\dq .Sh STANDARDS
161 \&.\e\(\dq .Sh HISTORY
162 \&.\e\(\dq .Sh AUTHORS
163 \&.\e\(\dq .Sh CAVEATS
164 \&.\e\(\dq .Sh BUGS
165 .Ed
166 .Pp
167 The sections in an
168 .Nm
169 document are conventionally ordered as they appear above.
170 Sections should be composed as follows:
171 .Bl -ohang -offset Ds
172 .It Em NAME
173 The name(s) and a one line description of the documented material.
174 The syntax for this as follows:
175 .Bd -literal -offset indent
176 \&.Nm name0 ,
177 \&.Nm name1 ,
178 \&.Nm name2
179 \&.Nd a one line description
180 .Ed
181 .Pp
182 Multiple
183 .Sq \&.Nm
184 names should be separated by commas.
185 .Pp
186 The
187 .Sx \&.Nm
188 macro(s) must precede the
189 .Sx \&.Nd
190 macro.
191 .Pp
192 See
193 .Sx \&.Nm

```

```

194 and
195 .Sx \&.Nd .
196 .It Em LIBRARY
197 The name of the library containing the documented material, which is
198 assumed to be a function in a section 2, 3, or 9 manual.
199 The syntax for this is as follows:
200 .Bd -literal -offset indent
201 \&.Lb libarm
202 .Ed
203 .Pp
204 See
205 .Sx \&.Lb .
206 .It Em SYNOPSIS
207 Documents the utility invocation syntax, function call syntax, or device
208 configuration.
209 .Pp
210 For the first, utilities (sections 1 and 1M), this is
211 generally structured as follows:
212 .Bd -literal -offset indent
213 \&.Nm bar
214 \&.Op Fl v
215 \&.Op Fl o Ar file
216 \&.Op Ar
217 \&.Nm foo
218 \&.Op Fl v
219 \&.Op Fl o Ar file
220 \&.Op Ar
221 .Ed
222 .Pp
223 Commands should be ordered alphabetically.
224 .Pp
225 For the second, function calls (sections 2, 3, 7I, 7P, 9):
226 .Bd -literal -offset indent
227 \&.In header.h
228 \&.Vt extern const char *global;
229 \&.Ft "char *"
230 \&.Fn foo "const char *src"
231 \&.Ft "char *"
232 \&.Fn bar "const char *src"
233 .Ed
234 .Pp
235 Ordering of
236 .Sx \&.In ,
237 .Sx \&.Vt ,
238 .Sx \&.Fn ,
239 and
240 .Sx \&.Fo
241 macros should follow C header-file conventions.
242 .Pp
243 And for the third, configurations (section 7D):
244 .Bd -literal -offset indent
245 \&.Pa /dev/device_node
246 .Ed
247 .Pp
248 Manuals not in these sections generally don't need a
249 .Em SYNOPSIS .
250 .Pp
251 Some macros are displayed differently in the
252 .Em SYNOPSIS
253 section, particularly
254 .Sx \&.Nm ,
255 .Sx \&.Cd ,
256 .Sx \&.Fd ,
257 .Sx \&.Fn ,
258 .Sx \&.Fo ,
259 .Sx \&.In ,

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```

260 .Sx \&Vt ,
261 and
262 .Sx \&Ft .
263 All of these macros are output on their own line.
264 If two such dissimilar macros are pairwise invoked (except for
265 .Sx \&Ft
266 before
267 .Sx \&Fo
268 or
269 .Sx \&Fn ) ,
270 they are separated by a vertical space, unless in the case of
271 .Sx \&Fo ,
272 .Sx \&Fn ,
273 and
274 .Sx \&Ft ,
275 which are always separated by vertical space.
276 .Pp
277 When text and macros following an
278 .Sx \&Nm
279 macro starting an input line span multiple output lines,
280 all output lines but the first will be indented to align
281 with the text immediately following the
282 .Sx \&Nm
283 macro, up to the next
284 .Sx \&Nm ,
285 .Sx \&Sh ,
286 or
287 .Sx \&Ss
288 macro or the end of an enclosing block, whichever comes first.
289 .It Em DESCRIPTION
290 This begins with an expansion of the brief, one line description in
291 .Em NAME :
292 .Bd -literal -offset indent
293 The
294 \&.Nm
295 utility does this, that, and the other.
296 .Ed
297 .Pp
298 It usually follows with a breakdown of the options (if documenting a
299 command), such as:
300 .Bd -literal -offset indent
301 The arguments are as follows:
302 \&.Bl \-tag \-width Ds
303 \&.It Fl v
304 Print verbose information.
305 \&.El
306 .Ed
307 .Pp
308 Manuals not documenting a command won't include the above fragment.
309 .Pp
310 Since the
311 .Em DESCRIPTION
312 section usually contains most of the text of a manual, longer manuals
313 often use the
314 .Sx \&Ss
315 macro to form subsections.
316 In very long manuals, the
317 .Em DESCRIPTION
318 may be split into multiple sections, each started by an
319 .Sx \&Sh
320 macro followed by a non-standard section name, and each having
321 several subsections, like in the present
322 .Nm
323 manual.
324 .It Em IMPLEMENTATION NOTES
325 Implementation-specific notes should be kept here.

```

```

326 This is useful when implementing standard functions that may have side
327 effects or notable algorithmic implications.
328 .It Em RETURN VALUES
329 This section documents the
330 return values of functions in sections 2, 3, and 9.
331 .Pp
332 See
333 .Sx \&Rv .
334 .It Em ENVIRONMENT
335 Lists the environment variables used by the utility,
336 and explains the syntax and semantics of their values.
337 The
338 .Xr environ 5
339 manual provides examples of typical content and formatting.
340 .Pp
341 See
342 .Sx \&Ev .
343 .It Em FILES
344 Documents files used.
345 It's helpful to document both the file name and a short description of how
346 the file is used (created, modified, etc.).
347 .Pp
348 See
349 .Sx \&Pa .
350 .It Em EXIT STATUS
351 This section documents the
352 command exit status for sections 1 and 1M.
353 Historically, this information was described in
354 .Em DIAGNOSTICS ,
355 a practise that is now discouraged.
356 .Pp
357 See
358 .Sx \&Ex .
359 .It Em EXAMPLES
360 Example usages.
361 This often contains snippets of well-formed, well-tested invocations.
362 Make sure that examples work properly!
363 .It Em DIAGNOSTICS
364 Documents error and diagnostic messages displayed to the user or
365 sent to logs. Note that exit
366 status and return values should be documented in the
367 .Em EXIT STATUS
368 and
369 .Em RETURN VALUES
370 sections.
371 .Pp
372 See
373 .Sx \&Bl
374 .Fl diag .
375 .It Em ERRORS
376 Documents error handling in sections 2, 3, and 9.
377 .Pp
378 See
379 .Sx \&Er .
380 .It Em ARCHITECTURE
381 This section is usually absent, but will be present when the
382 interface is specific to one or more architectures.
383 .It Em CODE SET INDEPENDENCE
384 Indicates whether the interface operates correctly with various different
385 code sets. True independent code sets will support not only ASCII and
386 Extended UNIX Codesets (EUC), but also other multi-byte encodings such as
387 UTF-8 and GB2312.
388 .Pp
389 Generally there will be some limitations that are fairly standard. See
390 .Xr standards 5 for more information about some of these. Most interfaces
391 should support at least UTF-8 in addition to ASCII.

```

```

392 .It Em INTERFACE STABILITY
393 Indicates the level of commitment to the interface. Interfaces can be described
394 with in the following ways:
395 .Bl -tag -width Ds
396 .It Sy Standard
397 .It Nm Standard
397 Indicates that the interface is defined by one or more standards bodies.
398 Generally, changes to the interface will be carefully managed to conform
399 to the relevant standards. These interfaces are generally the most suitable
400 for use in portable programs.
401 .It Sy Committed
401 .It Nm Committed
402 Indicates that the interface is intended to be preserved for the long-haul, and
403 will rarely, if ever change, and never without notification (barring
404 extraordinary and extenuating circumstances). These interfaces are
405 preferred over other interfaces with the exception of
406 .Sy Standard
406 .Nm Standard
407 interfaces.
408 .It Sy Uncommitted
408 .It Nm Uncommitted
409 Indicates that the interface may change. Generally, changes to these interfaces
410 should be infrequent, and some effort will be made to address compatibility
411 considerations when changing or removing such interfaces. However, there is
412 no firm commitment to the preservation of the interface. Most often this
413 is applied to interfaces where operational experience with the interface
414 is still limited and some need to change may be anticipated.
415 .Pp
416 Consumers should expect to revalidate any
417 .Sy Uncommitted
417 .Nm Uncommitted
418 interfaces when crossing release boundaries. Products intended for
419 use on many releases or intended to support compatibility with future
420 releases should avoid these interfaces.
421 .It Sy Volatile
421 .It Nm Volatile
422 The interface can change at any time for any reason. Often this relates to
423 interfaces that are part of external software components that are still evolving
424 rapidly. Consumers should not expect that the interface (either binary or
425 source level) will be unchanged from one release to the next.
426 .It Sy Not-an-Interface
426 .It Nm Not-an-Interface
427 Describes something that is specifically not intended for programmatic
428 consumption. For example, specific human-readable output, or the layout
429 of graphical items on a user interface, may be described this way. Generally
430 programmatic alternatives to these will be available, and should be used
431 when programmatic consumption is needed.
432 .It Sy Private
432 .It Nm Private
433 This is an internal interface. Generally these interfaces should only be
434 used within the project, and should not be used by other programs or modules.
435 The interface can and will change without notice as the project needs, at
436 any time.
437 .Pp
438 Most often, Private interfaces will lack any documentation whatsoever, and
439 generally any undocumented interface can be assumed to be Private.
440 .It Sy Obsolete
440 .It Nm Obsolete
441 The interface is not intended for use in new projects or programs, and may
442 be removed at a future date. The
443 .Sy Obsolete
443 .Nm Obsolete
444 word is a modifier that can
445 be applied to other commitment levels. For example an
446 .Sy Obsolete Committed
446 .Nm Obsolete Committed

```

```

447 interface is unlikely to be removed or changed, but nonetheless new use
448 is discouraged (perhaps a better newer alternative is present).
449 .El
450 .It Em MT-LEVEL
451 This section describes considerations for the interface when used within
452 programs that use multiple threads. More discussion of these considerations
453 is made in the MT-Level section of
454 .Xr attributes 5 .
455 The interface can be described in the following ways.
456 .Bl -tag -width Ds
457 .It Sy Safe
457 .It Nm Safe
458 Indicates the interface is safe for use within multiple threads. There
459 may be additional caveats that apply, in which case those will be
460 described. Note that some interfaces have semantics which may affect
461 other threads, but these should be an intrinsic part of the interface
462 rather than an unexpected side effect. For example, closing a file in
463 one thread will cause that file to be closed in all threads.
464 .It Sy Unsafe
464 .It Nm Unsafe
465 Indicates the interface is unsuitable for concurrent use within multiple
466 threads. A threaded application may still make use of the interface, but
467 will be required to provide external synchronization means to ensure that
468 only a single thread calls the interface at a time.
469 .It Sy MT-Safe
469 .It Nm MT-Safe
470 Indicates that the interface is not only safe for concurrent use, but is
471 designed for such use. For example, a
472 .Sy Safe
472 .Nm Safe
473 interface may make use of a global lock to provide safety, but at reduced
474 internal concurrency, whereas an
475 .Sy MT-Safe
475 .Nm MT-Safe
476 interface will be designed to be efficient even when used concurrently.
477 .It Sy Async-Signal-Safe
477 .It Nm Async-Signal-Safe
478 Indicates that the library is safe for use within a signal handler. An
479 .Sy MT-Safe
479 .Nm MT-Safe
480 interface can be made
481 .Sy Async-Signal-Safe
481 .Nm Async-Signal-Safe
482 by ensuring that it blocks signals when acquiring locks.
483 .It Sy Safe with Exections
483 .It Nm Safe with Exections
484 As for
485 .Sy Safe
485 .Nm Safe
486 but with specific exceptions noted.
487 .It Sy MT-Safe with Exections
487 .It Nm MT-Safe with Exections
488 As for
489 .Sy MT-Safe
489 .Nm MT-Safe
490 but with specific exceptions noted.
491 .El
492 .It Em SECURITY
493 Documents any security precautions that operators should consider.
494 .It Em SEE ALSO
495 References other manuals with related topics.
496 This section should exist for most manuals.
497 Cross-references should conventionally be ordered first by section, then
498 alphabetically.
499 .Pp
500 References to other documentation concerning the topic of the manual page,

```

501 for example authoritative books or journal articles, may also be
 502 provided in this section.

503 .Pp
 504 See
 505 .Sx \&Rs
 506 and
 507 .Sx \&Xr .

508 .It Em STANDARDS
 509 References any standards implemented or used.
 510 If not adhering to any standards, the
 511 .Em HISTORY
 512 section should be used instead.

513 .Pp
 514 See
 515 .Sx \&St .

516 .It Em HISTORY
 517 A brief history of the subject, including where it was first implemented,
 518 and when it was ported to or reimplemented for the operating system at hand.

519 .It Em AUTHORS
 520 Credits to the person or persons who wrote the code and/or documentation.
 521 Authors should generally be noted by both name and email address.

522 .Pp
 523 See
 524 .Sx \&An .

525 .It Em CAVEATS
 526 Common misuses and misunderstandings should be explained
 527 in this section.

528 .It Em BUGS
 529 Known bugs, limitations, and work-arounds should be described
 530 in this section.

531 .El
 532 .Sh MACRO OVERVIEW
 533 This overview is sorted such that macros of similar purpose are listed
 534 together, to help find the best macro for any given purpose.

535 Deprecated macros are not included in the overview, but can be found below
 536 in the alphabetical

537 .Sx MACRO REFERENCE .

538 .Ss Document preamble and NAME section macros

539 .Bl -column "Brq, Bro, Brc" description
 540 .It Sx \&Dd Ta document date: Ar month day , year
 541 .It Sx \&Dt Ta document title: Ar TITLE SECTION Op Ar volume | arch
 542 .It Sx \&Os Ta operating system version: Op Ar system Op Ar version
 543 .It Sx \&Nm Ta document name (one argument)
 544 .It Sx \&Nd Ta document description (one line)

545 .El
 546 .Ss Sections and cross references

547 .Bl -column "Brq, Bro, Brc" description
 548 .It Sx \&Sh Ta section header (one line)
 549 .It Sx \&Ss Ta subsection header (one line)
 550 .It Sx \&Sx Ta internal cross reference to a section or subsection
 551 .It Sx \&Xr Ta cross reference to another manual page: Ar name section
 552 .It Sx \&Pp , \&Lp Ta start a text paragraph (no arguments)

553 .El
 554 .Ss Displays and lists

555 .Bl -column "Brq, Bro, Brc" description
 556 .It Sx \&Bd , \&Ed Ta display block:
 557 .Fl Ar type
 558 .Op Fl offset Ar width
 559 .Op Fl compact
 560 .It Sx \&Dl Ta indented display (one line)
 561 .It Sx \&Dl Ta indented literal display (one line)
 562 .It Sx \&Bl , \&El Ta list block:
 563 .Fl Ar type
 564 .Op Fl width Ar val
 565 .Op Fl offset Ar val
 566 .Op Fl compact

567 .It Sx \&It Ta list item (syntax depends on Fl Ar type)
 568 .It Sx \&Ta Ta table cell separator in Sx \&Bl Fl column No lists
 569 .It Sx \&Rs , \&%* , \&Re Ta bibliographic block (references)

570 .El
 571 .Ss Spacing control

572 .Bl -column "Brq, Bro, Brc" description
 573 .It Sx \&Pf Ta prefix, no following horizontal space (one argument)
 574 .It Sx \&Ns Ta roman font, no preceding horizontal space (no arguments)
 575 .It Sx \&Ap Ta apostrophe without surrounding whitespace (no arguments)
 576 .It Sx \&Sm Ta switch horizontal spacing mode: Cm on | off
 577 .It Sx \&Bk , \&Ek Ta keep block: Fl words
 578 .It Sx \&br Ta force output line break in text mode (no arguments)
 579 .It Sx \&sp Ta force vertical space: Op Ar height

580 .El
 581 .Ss Semantic markup for command line utilities:

582 .Bl -column "Brq, Bro, Brc" description
 583 .It Sx \&Nm Ta start a SYNOPSIS block with the name of a utility
 584 .It Sx \&Fl Ta command line options (flags) (>=0 arguments)
 585 .It Sx \&Cm Ta command modifier (>0 arguments)
 586 .It Sx \&Ar Ta command arguments (>=0 arguments)
 587 .It Sx \&Op , \&Oo , \&Oc Ta optional syntax elements (enclosure)
 588 .It Sx \&Ic Ta internal or interactive command (>0 arguments)
 589 .It Sx \&Ev Ta environmental variable (>0 arguments)
 590 .It Sx \&Pa Ta file system path (>=0 arguments)

591 .El
 592 .Ss Semantic markup for function libraries:

593 .Bl -column "Brq, Bro, Brc" description
 594 .It Sx \&Lb Ta function library (one argument)
 595 .It Sx \&In Ta include file (one argument)
 596 .It Sx \&Ft Ta function type (>0 arguments)
 597 .It Sx \&Fo , \&Fc Ta function block: Ar filename
 598 .It Sx \&Fn Ta function name:

599 .Op Ar functype
 600 .Ar filename
 601 .Oo
 602 .Op Ar argtype
 603 .Ar argname
 604 .Oc
 605 .It Sx \&Fa Ta function argument (>0 arguments)
 606 .It Sx \&Vt Ta variable type (>0 arguments)
 607 .It Sx \&Va Ta variable name (>0 arguments)
 608 .It Sx \&Dv Ta defined variable or preprocessor constant (>0 arguments)
 609 .It Sx \&Er Ta error constant (>0 arguments)
 610 .It Sx \&Ev Ta environmental variable (>0 arguments)

611 .El
 612 .Ss Various semantic markup:

613 .Bl -column "Brq, Bro, Brc" description
 614 .It Sx \&An Ta author name (>0 arguments)
 615 .It Sx \&Lk Ta hyperlink: Ar uri Op Ar name
 616 .It Sx \&Mt Ta Do mailto Dc hyperlink: Ar address
 617 .It Sx \&Cd Ta kernel configuration declaration (>0 arguments)
 618 .It Sx \&Ad Ta memory address (>0 arguments)
 619 .It Sx \&Ms Ta mathematical symbol (>0 arguments)
 620 .It Sx \&Tn Ta tradename (>0 arguments)

621 .El
 622 .Ss Physical markup

623 .Bl -column "Brq, Bro, Brc" description
 624 .It Sx \&Em Ta italic font or underline (emphasis) (>0 arguments)
 625 .It Sx \&Sy Ta boldface font (symbolic) (>0 arguments)
 626 .It Sx \&Li Ta typewriter font (literal) (>0 arguments)
 627 .It Sx \&No Ta return to roman font (normal) (no arguments)
 628 .It Sx \&Bf , \&Ef Ta font block:
 629 .Op Fl Ar type | Cm \&Em | \&Li | \&Sy

630 .El
 631 .Ss Physical enclosures

632 .Bl -column "Brq, Bro, Brc" description

```

633 .It Sx \&Dq , \&Do , \&Dc Ta enclose in typographic double quotes: Dq text
634 .It Sx \&Qq , \&Qo , \&Qc Ta enclose in typewriter double quotes: Qq text
635 .It Sx \&Sq , \&So , \&Sc Ta enclose in single quotes: Sq text
636 .It Sx \&Ql Ta single-quoted literal text: Ql text
637 .It Sx \&Pq , \&Po , \&Pc Ta enclose in parentheses: Pq text
638 .It Sx \&Bq , \&Bo , \&Bc Ta enclose in square brackets: Bq text
639 .It Sx \&Brq , \&Bro , \&Brc Ta enclose in curly braces: Brq text
640 .It Sx \&Aq , \&Ao , \&Ac Ta enclose in angle brackets: Aq text
641 .It Sx \&Eo , \&Ec Ta generic enclosure
642 .El
643 .Ss Text production
644 .Bl -column "Brq, Bro, Brc" description
645 .It Sx \&Ex Fl std Ta standard command exit values: Op Ar utility ...
646 .It Sx \&Rv Fl std Ta standard function return values: Op Ar function ...
647 .It Sx \&St Ta reference to a standards document (one argument)
648 .It Sx \&Ux Ta Ux
649 .It Sx \&At Ta At
650 .It Sx \&Bx Ta Bx
651 .It Sx \&Bsx Ta Bsx
652 .It Sx \&Nx Ta Nx
653 .It Sx \&Fx Ta Fx
654 .It Sx \&Ox Ta Ox
655 .It Sx \&Dx Ta Dx
656 .El
657 .Sh MACRO REFERENCE
658 This section is a canonical reference of all macros, arranged
659 alphabetically.
660 For the scoping of individual macros, see
661 .Sx MACRO SYNTAX .
662 .Ss \&%A
663 Author name of an
664 .Sx \&Rs
665 block.
666 Multiple authors should each be accorded their own
667 .Sx \&%A
668 line.
669 Author names should be ordered with full or abbreviated forename(s)
670 first, then full surname.
671 .Ss \&%B
672 Book title of an
673 .Sx \&Rs
674 block.
675 This macro may also be used in a non-bibliographic context when
676 referring to book titles.
677 .Ss \&%C
678 Publication city or location of an
679 .Sx \&Rs
680 block.
681 .Ss \&%D
682 Publication date of an
683 .Sx \&Rs
684 block.
685 Recommended formats of arguments are
686 .Ar month day , year
687 or just
688 .Ar year .
689 .Ss \&%I
690 Publisher or issuer name of an
691 .Sx \&Rs
692 block.
693 .Ss \&%J
694 Journal name of an
695 .Sx \&Rs
696 block.
697 .Ss \&%N
698 Issue number (usually for journals) of an

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```

699 .Sx \&Rs
700 block.
701 .Ss \&%O
702 Optional information of an
703 .Sx \&Rs
704 block.
705 .Ss \&%P
706 Book or journal page number of an
707 .Sx \&Rs
708 block.
709 .Ss \&%Q
710 Institutional author (school, government, etc.) of an
711 .Sx \&Rs
712 block.
713 Multiple institutional authors should each be accorded their own
714 .Sx \&%Q
715 line.
716 .Ss \&%R
717 Technical report name of an
718 .Sx \&Rs
719 block.
720 .Ss \&%T
721 Article title of an
722 .Sx \&Rs
723 block.
724 This macro may also be used in a non-bibliographical context when
725 referring to article titles.
726 .Ss \&%U
727 URI of reference document.
728 .Ss \&%V
729 Volume number of an
730 .Sx \&Rs
731 block.
732 .Ss \&Ac
733 Close an
734 .Sx \&Ao
735 block.
736 Does not have any tail arguments.
737 .Ss \&Ad
738 Memory address.
739 Do not use this for postal addresses.
740 .Pp
741 Examples:
742 .Dl \&.Ad [0,$]
743 .Dl \&.Ad 0x00000000
744 .Ss \&An
745 Author name.
746 Can be used both for the authors of the program, function, or driver
747 documented in the manual, or for the authors of the manual itself.
748 Requires either the name of an author or one of the following arguments:
749 .Pp
750 .Bl -tag -width "-nosplitX" -offset indent -compact
751 .It Fl split
752 Start a new output line before each subsequent invocation of
753 .Sx \&An .
754 .It Fl nosplit
755 The opposite of
756 .Fl split .
757 .El
758 .Pp
759 The default is
760 .Fl nosplit .
761 The effect of selecting either of the
762 .Fl split
763 modes ends at the beginning of the
764 .Em AUTHORS

```

```

765 section.
766 In the
767 .Em AUTHORS
768 section, the default is
769 .Fl nosplit
770 for the first author listing and
771 .Fl split
772 for all other author listings.
773 .Pp
774 Examples:
775 .Dl \&.An -nosplit
776 .Dl \&.An Kristaps Dzonsons \&Aq kristaps@bsd.lv
777 .Ss \&Ao
778 Begin a block enclosed by angle brackets.
779 Does not have any head arguments.
780 .Pp
781 Examples:
782 .Dl \&.Fl -key= \&Ns \&Ao \&Ar val \&Ac
783 .Pp
784 See also
785 .Sx \&Aq .
786 .Ss \&Ap
787 Inserts an apostrophe without any surrounding whitespace.
788 This is generally used as a grammatical device when referring to the verb
789 form of a function.
790 .Pp
791 Examples:
792 .Dl \&.Fn execve \&Ap d
793 .Ss \&Aq
794 Encloses its arguments in angle brackets.
795 .Pp
796 Examples:
797 .Dl \&.Fl -key= \&Ns \&Aq \&Ar val
798 .Pp
799 .Em Remarks :
800 this macro is often abused for rendering URIs, which should instead use
801 .Sx \&Lk
802 or
803 .Sx \&Mt ,
804 or to note pre-processor
805 .Dq Li #include
806 statements, which should use
807 .Sx \&In .
808 .Pp
809 See also
810 .Sx \&Ao .
811 .Ss \&Ar
812 Command arguments.
813 If an argument is not provided, the string
814 .Dq file ... \&
815 is used as a default.
816 .Pp
817 Examples:
818 .Dl ".Fl o Ar file"
819 .Dl ".Ar"
820 .Dl ".Ar arg1 , arg2 ."
821 .Pp
822 The arguments to the
823 .Sx \&Ar
824 macro are names and placeholders for command arguments;
825 for fixed strings to be passed verbatim as arguments, use
826 .Sx \&Fl
827 or
828 .Sx \&Cm .
829 .Ss \&At
830 Formats an AT&T version.

```

```

831 Accepts one optional argument:
832 .Pp
833 .Bl -tag -width "v[1-7] | 32vX" -offset indent -compact
834 .It Cm v[1-7] | 32v
835 A version of
836 .At .
837 .It Cm III
838 .At III .
839 .It Cm V[. [1-4]]?
840 A version of
841 .At V .
842 .El
843 .Pp
844 Note that these arguments do not begin with a hyphen.
845 .Pp
846 Examples:
847 .Dl \&.At
848 .Dl \&.At III
849 .Dl \&.At V.1
850 .Pp
851 See also
852 .Sx \&Bsx ,
853 .Sx \&Bx ,
854 .Sx \&Dx ,
855 .Sx \&Fx ,
856 .Sx \&Nx ,
857 .Sx \&Ox ,
858 and
859 .Sx \&Ux .
860 .Ss \&Bc
861 Close a
862 .Sx \&Bo
863 block.
864 Does not have any tail arguments.
865 .Ss \&Bd
866 Begin a display block.
867 Its syntax is as follows:
868 .Bd -ragged -offset indent
869 .Pf \. Sx \&Bd
870 .Fl Ns Ar type
871 .Op Fl offset Ar width
872 .Op Fl compact
873 .Ed
874 .Pp
875 Display blocks are used to select a different indentation and
876 justification than the one used by the surrounding text.
877 They may contain both macro lines and text lines.
878 By default, a display block is preceded by a vertical space.
879 .Pp
880 The
881 .Ar type
882 must be one of the following:
883 .Bl -tag -width l3n -offset indent
884 .It Fl centered
885 Produce one output line from each input line, and centre-justify each line.
886 Using this display type is not recommended; many
887 .Nm
888 implementations render it poorly.
889 .It Fl filled
890 Change the positions of line breaks to fill each line, and left- and
891 right-justify the resulting block.
892 .It Fl literal
893 Produce one output line from each input line,
894 and do not justify the block at all.
895 Preserve white space as it appears in the input.
896 Always use a constant-width font.

```

```

897 Use this for displaying source code.
898 .It Fl ragged
899 Change the positions of line breaks to fill each line, and left-justify
900 the resulting block.
901 .It Fl unfilled
902 The same as
903 .Fl literal ,
904 but using the same font as for normal text, which is a variable width font
905 if supported by the output device.
906 .El
907 .Pp
908 The
909 .Ar type
910 must be provided first.
911 Additional arguments may follow:
912 .Bl -tag -width l3n -offset indent
913 .It Fl offset Ar width
914 Indent the display by the
915 .Ar width ,
916 which may be one of the following:
917 .Bl -item
918 .It
919 One of the pre-defined strings
920 .Cm indent ,
921 the width of a standard indentation (six constant width characters);
922 .Cm indent-two ,
923 twice
924 .Cm indent ;
925 .Cm left ,
926 which has no effect;
927 .Cm right ,
928 which justifies to the right margin; or
929 .Cm center ,
930 which aligns around an imagined centre axis.
931 .It
932 A macro invocation, which selects a predefined width
933 associated with that macro.
934 The most popular is the imaginary macro
935 .Ar \&Ds ,
936 which resolves to
937 .Sy 6n .
938 .It
939 A width using the syntax described in
940 .Sx Scaling Widths .
941 .It
942 An arbitrary string, which indents by the length of this string.
943 .El
944 .Pp
945 When the argument is missing,
946 .Fl offset
947 is ignored.
948 .It Fl compact
949 Do not assert vertical space before the display.
950 .El
951 .Pp
952 Examples:
953 .Bd -literal -offset indent
954 \&.Bd \-literal \-offset indent \-compact
955     Hello         world.
956 \&.Ed
957 .Ed
958 .Pp
959 See also
960 .Sx \&Dl
961 and
962 .Sx \&Dl .

```

```

963 .Ss \&Bf
964 Change the font mode for a scoped block of text.
965 Its syntax is as follows:
966 .Bd -ragged -offset indent
967 .Pf \. Sx \&Bf
968 .Oo
969 .Fl emphasis | literal | symbolic |
970 .Cm \&Em | \&Li | \&Sy
971 .Oc
972 .Ed
973 .Pp
974 The
975 .Fl emphasis
976 and
977 .Cm \&Em
978 argument are equivalent, as are
979 .Fl symbolic
980 and
981 .Cm \&Sy ,
982 and
983 .Fl literal
984 and
985 .Cm \&Li .
986 Without an argument, this macro does nothing.
987 The font mode continues until broken by a new font mode in a nested
988 scope or
989 .Sx \&Ef
990 is encountered.
991 .Pp
992 See also
993 .Sx \&Li ,
994 .Sx \&Ef ,
995 .Sx \&Em ,
996 and
997 .Sx \&Sy .
998 .Ss \&Bk
999 For each macro, keep its output together on the same output line,
1000 until the end of the macro or the end of the input line is reached,
1001 whichever comes first.
1002 Line breaks in text lines are unaffected.
1003 The syntax is as follows:
1004 .Pp
1005 .Dl Pf \. Sx \&Bk Fl words
1006 .Pp
1007 The
1008 .Fl words
1009 argument is required; additional arguments are ignored.
1010 .Pp
1011 The following example will not break within each
1012 .Sx \&Op
1013 macro line:
1014 .Bd -literal -offset indent
1015 \&.Bk \-words
1016 \&.Op Fl f Ar flags
1017 \&.Op Fl o Ar output
1018 \&.Ek
1019 .Ed
1020 .Pp
1021 Be careful in using over-long lines within a keep block!
1022 Doing so will clobber the right margin.
1023 .Ss \&Bl
1024 Begin a list.
1025 Lists consist of items specified using the
1026 .Sx \&It
1027 macro, containing a head or a body or both.
1028 The list syntax is as follows:

```



```

1029 .Bd -ragged -offset indent
1030 .Pf \. Sx \&B1
1031 .Fl Ns Ar type
1032 .Op Fl width Ar val
1033 .Op Fl offset Ar val
1034 .Op Fl compact
1035 .Op HEAD ...
1036 .Ed
1037 .Pp
1038 The list
1039 .Ar type
1040 is mandatory and must be specified first.
1041 The
1042 .Fl width
1043 and
1044 .Fl offset
1045 arguments accept
1046 .Sx Scaling Widths
1047 or use the length of the given string.
1048 The
1049 .Fl offset
1050 is a global indentation for the whole list, affecting both item heads
1051 and bodies.
1052 For those list types supporting it, the
1053 .Fl width
1054 argument requests an additional indentation of item bodies,
1055 to be added to the
1056 .Fl offset .
1057 Unless the
1058 .Fl compact
1059 argument is specified, list entries are separated by vertical space.
1060 .Pp
1061 A list must specify one of the following list types:
1062 .Bl -tag -width l2n -offset indent
1063 .It Fl bullet
1064 No item heads can be specified, but a bullet will be printed at the head
1065 of each item.
1066 Item bodies start on the same output line as the bullet
1067 and are indented according to the
1068 .Fl width
1069 argument.
1070 .It Fl column
1071 A columnated list.
1072 The
1073 .Fl width
1074 argument has no effect; instead, each argument specifies the width
1075 of one column, using either the
1076 .Sx Scaling Widths
1077 syntax or the string length of the argument.
1078 If the first line of the body of a
1079 .Fl column
1080 list is not an
1081 .Sx \&It
1082 macro line,
1083 .Sx \&It
1084 contexts spanning one input line each are implied until an
1085 .Sx \&It
1086 macro line is encountered, at which point items start being interpreted as
1087 described in the
1088 .Sx \&It
1089 documentation.
1090 .It Fl dash
1091 Like
1092 .Fl bullet ,
1093 except that dashes are used in place of bullets.
1094 .It Fl diag

```

```

1095 Like
1096 .Fl inset ,
1097 except that item heads are not parsed for macro invocations.
1098 Most often used in the
1099 .Em DIAGNOSTICS
1100 section with error constants in the item heads.
1101 .It Fl enum
1102 A numbered list.
1103 No item heads can be specified.
1104 Formatted like
1105 .Fl bullet ,
1106 except that cardinal numbers are used in place of bullets,
1107 starting at 1.
1108 .It Fl hang
1109 Like
1110 .Fl tag ,
1111 except that the first lines of item bodies are not indented, but follow
1112 the item heads like in
1113 .Fl inset
1114 lists.
1115 .It Fl hyphen
1116 Synonym for
1117 .Fl dash .
1118 .It Fl inset
1119 Item bodies follow items heads on the same line, using normal inter-word
1120 spacing.
1121 Bodies are not indented, and the
1122 .Fl width
1123 argument is ignored.
1124 .It Fl item
1125 No item heads can be specified, and none are printed.
1126 Bodies are not indented, and the
1127 .Fl width
1128 argument is ignored.
1129 .It Fl ohang
1130 Item bodies start on the line following item heads and are not indented.
1131 The
1132 .Fl width
1133 argument is ignored.
1134 .It Fl tag
1135 Item bodies are indented according to the
1136 .Fl width
1137 argument.
1138 When an item head fits inside the indentation, the item body follows
1139 this head on the same output line.
1140 Otherwise, the body starts on the output line following the head.
1141 .El
1142 .Pp
1143 Lists may be nested within lists and displays.
1144 Nesting of
1145 .Fl column
1146 and
1147 .Fl enum
1148 lists may not be portable.
1149 .Pp
1150 See also
1151 .Sx \&El
1152 and
1153 .Sx \&It .
1154 .Ss \&Bo
1155 Begin a block enclosed by square brackets.
1156 Does not have any head arguments.
1157 .Pp
1158 Examples:
1159 .Bd -literal -offset indent -compact
1160 \&Bo 1 ,

```

```

1161 \&.Dv BUFSIZ \&Bc
1162 .Ed
1163 .Pp
1164 See also
1165 .Sx \&Bq .
1166 .Ss \&Bq
1167 Encloses its arguments in square brackets.
1168 .Pp
1169 Examples:
1170 .Dl \&.Bq 1 , \&Dv BUFSIZ
1171 .Pp
1172 .Em Remarks :
1173 this macro is sometimes abused to emulate optional arguments for
1174 commands; the correct macros to use for this purpose are
1175 .Sx \&Op ,
1176 .Sx \&Oo ,
1177 and
1178 .Sx \&Oc .
1179 .Pp
1180 See also
1181 .Sx \&Bo .
1182 .Ss \&Brc
1183 Close a
1184 .Sx \&Bro
1185 block.
1186 Does not have any tail arguments.
1187 .Ss \&Bro
1188 Begin a block enclosed by curly braces.
1189 Does not have any head arguments.
1190 .Pp
1191 Examples:
1192 .Bd -literal -offset indent -compact
1193 \&.Bro 1 , ... , \&Va n
1194 \&.Va n \&Brc
1195 .Ed
1196 .Pp
1197 See also
1198 .Sx \&Brq .
1199 .Ss \&Brq
1200 Encloses its arguments in curly braces.
1201 .Pp
1202 Examples:
1203 .Dl \&.Brq 1 , ... , \&Va n
1204 .Pp
1205 See also
1206 .Sx \&Bro .
1207 .Ss \&Bsx
1208 Format the BSD/OS version provided as an argument, or a default value if
1209 no argument is provided.
1210 .Pp
1211 Examples:
1212 .Dl \&.Bsx 1.0
1213 .Dl \&.Bsx
1214 .Pp
1215 See also
1216 .Sx \&At ,
1217 .Sx \&Bx ,
1218 .Sx \&Dx ,
1219 .Sx \&Fx ,
1220 .Sx \&Nx ,
1221 .Sx \&Ox ,
1222 and
1223 .Sx \&Ux .
1224 .Ss \&Bt
1225 Prints
1226 .Dq is currently in beta test.

```

```

1227 .Ss \&Bx
1228 Format the BSD version provided as an argument, or a default value if no
1229 argument is provided.
1230 .Pp
1231 Examples:
1232 .Dl \&.Bx 4.3 Tahoe
1233 .Dl \&.Bx 4.4
1234 .Dl \&.Bx
1235 .Pp
1236 See also
1237 .Sx \&At ,
1238 .Sx \&Bsx ,
1239 .Sx \&Dx ,
1240 .Sx \&Fx ,
1241 .Sx \&Nx ,
1242 .Sx \&Ox ,
1243 and
1244 .Sx \&Ux .
1245 .Ss \&Cd
1246 Kernel configuration declaration. It is found in pages for
1247 .Bx
1248 and not used here.
1249 .Pp
1250 Examples:
1251 .Dl \&.Cd device le0 at scode?
1252 .Pp
1253 .Em Remarks :
1254 this macro is commonly abused by using quoted literals to retain
1255 whitespace and align consecutive
1256 .Sx \&Cd
1257 declarations.
1258 This practise is discouraged.
1259 .Ss \&Cm
1260 Command modifiers.
1261 Typically used for fixed strings passed as arguments, unless
1262 .Sx \&Fl
1263 is more appropriate.
1264 Also useful when specifying configuration options or keys.
1265 .Pp
1266 Examples:
1267 .Dl ".Nm mt Fl f Ar device Cm rewind"
1268 .Dl ".Nm ps Fl o Cm pid , Ns Cm command"
1269 .Dl ".Nm dd Cm if= Ns Ar file1 Cm of= Ns Ar file2"
1270 .Dl ".Cm IdentityFile Pa ~/.ssh/id_rsa"
1271 .Dl ".Cm LogLevel Dv DEBUG"
1272 .Ss \&Dl
1273 One-line indented display.
1274 This is formatted by the default rules and is useful for simple indented
1275 statements.
1276 It is followed by a newline.
1277 .Pp
1278 Examples:
1279 .Dl \&.Dl \&Fl abcdefgh
1280 .Pp
1281 See also
1282 .Sx \&Bd
1283 and
1284 .Sx \&Dl .
1285 .Ss \&Db
1286 Switch debugging mode.
1287 Its syntax is as follows:
1288 .Pp
1289 .Dl Pf \. Sx \&Db Cm on | off
1290 .Pp
1291 This macro is ignored by
1292 .Xr mandoc 1 .

```

```

1293 .Ss \&Dc
1294 Close a
1295 .Sx \&Do
1296 block.
1297 Does not have any tail arguments.
1298 .Ss \&Dd
1299 Document date.
1300 This is the mandatory first macro of any
1301 .Nm
1302 manual.
1303 Its syntax is as follows:
1304 .Pp
1305 .Dl Pf \. Sx \&Dd Ar month day , year
1306 .Pp
1307 The
1308 .Ar month
1309 is the full English month name, the
1310 .Ar day
1311 is an optionally zero-padded numeral, and the
1312 .Ar year
1313 is the full four-digit year.
1314 .Pp
1315 Other arguments are not portable; the
1316 .Xr mandoc 1
1317 utility handles them as follows:
1318 .Bl -dash -offset 3n -compact
1319 .It
1320 To have the date automatically filled in by the
1321 .Ox
1322 version of
1323 .Xr cvs 1 ,
1324 the special string
1325 .Dq $\&Mdocdate$
1326 can be given as an argument.
1327 .It
1328 A few alternative date formats are accepted as well
1329 and converted to the standard form.
1330 .It
1331 If a date string cannot be parsed, it is used verbatim.
1332 .It
1333 If no date string is given, the current date is used.
1334 .El
1335 .Pp
1336 Examples:
1337 .Dl \&.Dd $\&Mdocdate$
1338 .Dl \&.Dd $\&Mdocdate: July 21 2007$
1339 .Dl \&.Dd July 21, 2007
1340 .Pp
1341 See also
1342 .Sx \&Dt
1343 and
1344 .Sx \&Os .
1345 .Ss \&Dl
1346 One-line intended display.
1347 This is formatted as literal text and is useful for commands and
1348 invocations.
1349 It is followed by a newline.
1350 .Pp
1351 Examples:
1352 .Dl \&.Dl % mandoc mdoc.5 \e(ba less
1353 .Pp
1354 See also
1355 .Sx \&Bd
1356 and
1357 .Sx \&Dl .
1358 .Ss \&Do

```

```

1359 Begin a block enclosed by double quotes.
1360 Does not have any head arguments.
1361 .Pp
1362 Examples:
1363 .Bd -literal -offset indent -compact
1364 \&.Do
1365 April is the cruellest month
1366 \&.Dc
1367 \e(em T.S. Eliot
1368 .Ed
1369 .Pp
1370 See also
1371 .Sx \&Dq .
1372 .Ss \&Dq
1373 Encloses its arguments in
1374 .Dq typographic
1375 double-quotes.
1376 .Pp
1377 Examples:
1378 .Bd -literal -offset indent -compact
1379 \&.Dq April is the cruellest month
1380 \e(em T.S. Eliot
1381 .Ed
1382 .Pp
1383 See also
1384 .Sx \&Qq ,
1385 .Sx \&Sq ,
1386 and
1387 .Sx \&Do .
1388 .Ss \&Dt
1389 Document title.
1390 This is the mandatory second macro of any
1391 .Nm
1392 file.
1393 Its syntax is as follows:
1394 .Bd -ragged -offset indent
1395 .Pf \. Sx \&Dt
1396 .Oo
1397 .Ar title
1398 .Oo
1399 .Ar section
1400 .Op Ar volume
1401 .Op Ar arch
1402 .Oc
1403 .Oc
1404 .Ed
1405 .Pp
1406 Its arguments are as follows:
1407 .Bl -tag -width Ds -offset Ds
1408 .It Ar title
1409 The document's title (name), defaulting to
1410 .Dq UNKNOWN
1411 if unspecified.
1412 It should be capitalised.
1413 .It Ar section
1414 The manual section. It should correspond to the manual's filename suffix
1415 and defaults to
1416 .Dq 1
1417 if unspecified.
1418 .It Ar volume
1419 This overrides the volume inferred from
1420 .Ar section .
1421 This field is optional.
1422 .It Ar arch
1423 This specifies the machine architecture a manual page applies to,
1424 where relevant.

```

1425 .El
 1426 .Ss \&Dv
 1427 Defined variables such as preprocessor constants, constant symbols,
 1428 enumeration values, and so on.
 1429 .Pp
 1430 Examples:
 1431 .Dl \&.Dv NULL
 1432 .Dl \&.Dv BUFSIZ
 1433 .Dl \&.Dv STDOUT_FILENO
 1434 .Pp
 1435 See also
 1436 .Sx \&Er
 1437 and
 1438 .Sx \&Ev
 1439 for special-purpose constants and
 1440 .Sx \&Va
 1441 for variable symbols.
 1442 .Ss \&Dx
 1443 Format the DragonFly BSD version provided as an argument, or a default
 1444 value if no argument is provided.
 1445 .Pp
 1446 Examples:
 1447 .Dl \&.Dx 2.4.1
 1448 .Dl \&.Dx
 1449 .Pp
 1450 See also
 1451 .Sx \&At ,
 1452 .Sx \&Bsx ,
 1453 .Sx \&Bx ,
 1454 .Sx \&Fx ,
 1455 .Sx \&Nx ,
 1456 .Sx \&Ox ,
 1457 and
 1458 .Sx \&Ux .
 1459 .Ss \&Ec
 1460 Close a scope started by
 1461 .Sx \&Eo .
 1462 Its syntax is as follows:
 1463 .Pp
 1464 .Dl Pf \. Sx \&Ec Op Ar TERM
 1465 .Pp
 1466 The
 1467 .Ar TERM
 1468 argument is used as the enclosure tail, for example, specifying \e(rq
 1469 will emulate
 1470 .Sx \&Dc .
 1471 .Ss \&Ed
 1472 End a display context started by
 1473 .Sx \&Bd .
 1474 .Ss \&Ef
 1475 End a font mode context started by
 1476 .Sx \&Bf .
 1477 .Ss \&Ek
 1478 End a keep context started by
 1479 .Sx \&Bk .
 1480 .Ss \&El
 1481 End a list context started by
 1482 .Sx \&Bl .
 1483 .Pp
 1484 See also
 1485 .Sx \&Bl
 1486 and
 1487 .Sx \&It .
 1488 .Ss \&Em
 1489 Denotes text that should be
 1490 .Em emphasised .

1491 Note that this is a presentation term and should not be used for
 1492 stylistically decorating technical terms.
 1493 Depending on the output device, this is usually represented
 1494 using an italic font or underlined characters.
 1495 .Pp
 1496 Examples:
 1497 .Dl \&.Em Warnings!
 1498 .Dl \&.Em Remarks :
 1499 .Pp
 1500 See also
 1501 .Sx \&Bf ,
 1502 .Sx \&Li ,
 1503 .Sx \&No ,
 1504 and
 1505 .Sx \&Sy .
 1506 .Ss \&En
 1507 This macro is obsolete and not implemented in
 1508 .Xr mandoc 1 .
 1509 .Ss \&Eo
 1510 An arbitrary enclosure.
 1511 Its syntax is as follows:
 1512 .Pp
 1513 .Dl Pf \. Sx \&Eo Op Ar TERM
 1514 .Pp
 1515 The
 1516 .Ar TERM
 1517 argument is used as the enclosure head, for example, specifying \e(lq
 1518 will emulate
 1519 .Sx \&Do .
 1520 .Ss \&Er
 1521 Error constants for definitions of the
 1522 .Va errno
 1523 libc global variable.
 1524 This is most often used in section 2 and 3 manual pages.
 1525 .Pp
 1526 Examples:
 1527 .Dl \&.Er EPERM
 1528 .Dl \&.Er ENOENT
 1529 .Pp
 1530 See also
 1531 .Sx \&Dv
 1532 for general constants.
 1533 .Ss \&Es
 1534 This macro is obsolete and not implemented.
 1535 .Ss \&Ev
 1536 Environmental variables such as those specified in
 1537 .Xr environ 5 .
 1538 .Pp
 1539 Examples:
 1540 .Dl \&.Ev DISPLAY
 1541 .Dl \&.Ev PATH
 1542 .Pp
 1543 See also
 1544 .Sx \&Dv
 1545 for general constants.
 1546 .Ss \&Ex
 1547 Insert a standard sentence regarding command exit values of 0 on success
 1548 and >0 on failure.
 1549 This is most often used in section 1 and 1M manual pages.
 1550 Its syntax is as follows:
 1551 .Pp
 1552 .Dl Pf \. Sx \&Ex Fl std Op Ar utility ...
 1553 .Pp
 1554 If
 1555 .Ar utility
 1556 is not specified, the document's name set by

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1557 .Sx \&Nm
1558 is used.
1559 Multiple
1560 .Ar utility
1561 arguments are treated as separate utilities.
1562 .Pp
1563 See also
1564 .Sx \&Rv .
1565 .Ss \&Fa
1566 Function argument.
1567 Its syntax is as follows:
1568 .Bd -ragged -offset indent
1569 .Pf \. Sx \&Fa
1570 .Op Cm argtype
1571 .Cm argname
1572 .Ed
1573 .Pp
1574 This may be invoked for names with or without the corresponding type.
1575 It is also used to specify the field name of a structure.
1576 Most often, the
1577 .Sx \&Fa
1578 macro is used in the
1579 .Em SYNOPSIS
1580 within
1581 .Sx \&Fo
1582 section when documenting multi-line function prototypes.
1583 If invoked with multiple arguments, the arguments are separated by a
1584 comma.
1585 Furthermore, if the following macro is another
1586 .Sx \&Fa ,
1587 the last argument will also have a trailing comma.
1588 .Pp
1589 Examples:
1590 .Dl \&Fa \((dqconst char *p\((dq
1591 .Dl \&Fa \((dqint a\((dq \((dqint b\((dq \((dqint c\((dq
1592 .Dl \&Fa foo
1593 .Pp
1594 See also
1595 .Sx \&Fo .
1596 .Ss \&Fc
1597 End a function context started by
1598 .Sx \&Fo .
1599 .Ss \&Fd
1600 Historically used to document include files.
1601 This usage has been deprecated in favour of
1602 .Sx \&In .
1603 Do not use this macro.
1604 .Pp
1605 See also
1606 .Sx MANUAL STRUCTURE
1607 and
1608 .Sx \&In .
1609 .Ss \&Fl
1610 Command-line flag or option.
1611 Used when listing arguments to command-line utilities.
1612 Prints a fixed-width hyphen
1613 .Sq \-
1614 directly followed by each argument.
1615 If no arguments are provided, a hyphen is printed followed by a space.
1616 If the argument is a macro, a hyphen is prefixed to the subsequent macro
1617 output.
1618 .Pp
1619 Examples:
1620 .Dl ".Fl R Op Fl H | L | P"
1621 .Dl ".Op Fl lAaCodFfgHhikLlmnopqRrSsTtux"
1622 .Dl ".Fl type Cm d Fl name Pa CVS"

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1623 .Dl ".Fl Ar signal_number"
1624 .Dl ".Fl o Fl"
1625 .Pp
1626 See also
1627 .Sx \&Cm .
1628 .Ss \&Fn
1629 A function name.
1630 Its syntax is as follows:
1631 .Bd -ragged -offset indent
1632 .Pf \. Ns Sx \&Fn
1633 .Op Ar functype
1634 .Ar funcname
1635 .Op Oo Ar argtype Oc Ar argname
1636 .Ed
1637 .Pp
1638 Function arguments are surrounded in parenthesis and
1639 are delimited by commas.
1640 If no arguments are specified, blank parenthesis are output.
1641 In the
1642 .Em SYNOPSIS
1643 section, this macro starts a new output line,
1644 and a blank line is automatically inserted between function definitions.
1645 .Pp
1646 Examples:
1647 .Dl \&Fn \((dqint funcname\((dq \((dqint arg0\((dq \((dqint arg1\((dq
1648 .Dl \&Fn funcname \((dqint arg0\((dq
1649 .Dl \&Fn funcname arg0
1650 .Pp
1651 .Bd -literal -offset indent -compact
1652 \&Ft functype
1653 \&Fn funcname
1654 .Ed
1655 .Pp
1656 When referring to a function documented in another manual page, use
1657 .Sx \&Xr
1658 instead.
1659 See also
1660 .Sx MANUAL STRUCTURE ,
1661 .Sx \&Fo ,
1662 and
1663 .Sx \&Ft .
1664 .Ss \&Fo
1665 Begin a function block.
1666 This is a multi-line version of
1667 .Sx \&Fn .
1668 Its syntax is as follows:
1669 .Pp
1670 .Dl Pf \. Sx \&Fo Ar funcname
1671 .Pp
1672 Invocations usually occur in the following context:
1673 .Bd -ragged -offset indent
1674 .Pf \. Sx \&Ft Ar functype
1675 .br
1676 .Pf \. Sx \&Fo Ar funcname
1677 .br
1678 .Pf \. Sx \&Fa Oo Ar argtype Oc Ar argname
1679 .br
1680 \&.\.
1681 .br
1682 .Pf \. Sx \&Fc
1683 .Ed
1684 .Pp
1685 A
1686 .Sx \&Fo
1687 scope is closed by
1688 .Sx \&Fc .

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1689 .Pp
1690 See also
1691 .Sx MANUAL STRUCTURE ,
1692 .Sx \&Fa ,
1693 .Sx \&Fc ,
1694 and
1695 .Sx \&Ft .
1696 .Ss \&Fr
1697 This macro is obsolete and not implemented in
1698 .Xr mandoc 1 .
1699 .Pp
1700 It was used to show function return values.
1701 The syntax was:
1702 .Pp
1703 .Dl Pf . Sx \&Fr Ar value
1704 .Ss \&Ft
1705 A function type.
1706 Its syntax is as follows:
1707 .Pp
1708 .Dl Pf \. Sx \&Ft Ar functype
1709 .Pp
1710 In the
1711 .Em SYNOPSIS
1712 section, a new output line is started after this macro.
1713 .Pp
1714 Examples:
1715 .Dl \&Ft int
1716 .Bd -literal -offset indent -compact
1717 \&Ft functype
1718 \&Fn funcname
1719 .Ed
1720 .Pp
1721 See also
1722 .Sx MANUAL STRUCTURE ,
1723 .Sx \&Fn ,
1724 and
1725 .Sx \&Fo .
1726 .Ss \&Fx
1727 Format the
1728 .Fx
1729 version provided as an argument, or a default value
1730 if no argument is provided.
1731 .Pp
1732 Examples:
1733 .Dl \&Fx 7.1
1734 .Dl \&Fx
1735 .Pp
1736 See also
1737 .Sx \&At ,
1738 .Sx \&Bsx ,
1739 .Sx \&Bx ,
1740 .Sx \&Dx ,
1741 .Sx \&Nx ,
1742 .Sx \&Ox ,
1743 and
1744 .Sx \&Ux .
1745 .Ss \&Hf
1746 This macro is not implemented in
1747 .Xr mandoc 1 .
1748 .Pp
1749 It was used to include the contents of a (header) file literally.
1750 The syntax was:
1751 .Pp
1752 .Dl Pf . Sx \&Hf Ar filename
1753 .Ss \&Ic
1754 Designate an internal or interactive command.

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1755 This is similar to
1756 .Sx \&Cm
1757 but used for instructions rather than values.
1758 .Pp
1759 Examples:
1760 .Dl \&.Ic :wq
1761 .Dl \&.Ic hash
1762 .Dl \&.Ic alias
1763 .Pp
1764 Note that using
1765 .Sx \&Bd Fl literal
1766 or
1767 .Sx \&Dl
1768 is preferred for displaying code; the
1769 .Sx \&Ic
1770 macro is used when referring to specific instructions.
1771 .Ss \&In
1772 An
1773 .Dq include
1774 file.
1775 When invoked as the first macro on an input line in the
1776 .Em SYNOPSIS
1777 section, the argument is displayed in angle brackets
1778 and preceded by
1779 .Dq #include ,
1780 and a blank line is inserted in front if there is a preceding
1781 function declaration.
1782 This is most often used in section 2, 3, and 9 manual pages.
1783 .Pp
1784 Examples:
1785 .Dl \&.In sys/types.h
1786 .Pp
1787 See also
1788 .Sx MANUAL STRUCTURE .
1789 .Ss \&It
1790 A list item.
1791 The syntax of this macro depends on the list type.
1792 .Pp
1793 Lists
1794 of type
1795 .Fl hang ,
1796 .Fl ohang ,
1797 .Fl inset ,
1798 and
1799 .Fl diag
1800 have the following syntax:
1801 .Pp
1802 .Dl Pf \. Sx \&It Ar args
1803 .Pp
1804 Lists of type
1805 .Fl bullet ,
1806 .Fl dash ,
1807 .Fl enum ,
1808 .Fl hyphen
1809 and
1810 .Fl item
1811 have the following syntax:
1812 .Pp
1813 .Dl Pf \. Sx \&It
1814 .Pp
1815 with subsequent lines interpreted within the scope of the
1816 .Sx \&It
1817 until either a closing
1818 .Sx \&El
1819 or another
1820 .Sx \&It .

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1821 .Pp
1822 The
1823 .Fl tag
1824 list has the following syntax:
1825 .Pp
1826 .Dl Pf \. Sx \&It Op Cm args
1827 .Pp
1828 Subsequent lines are interpreted as with
1829 .Fl bullet
1830 and family.
1831 The line arguments correspond to the list's left-hand side; body
1832 arguments correspond to the list's contents.
1833 .Pp
1834 The
1835 .Fl column
1836 list is the most complicated.
1837 Its syntax is as follows:
1838 .Pp
1839 .Dl Pf \. Sx \&It Ar cell Op <TAB> Ar cell ...
1840 .Dl Pf \. Sx \&It Ar cell Op Sx \&Ta Ar cell ...
1841 .Pp
1842 The arguments consist of one or more lines of text and macros
1843 representing a complete table line.
1844 Cells within the line are delimited by tabs or by the special
1845 .Sx \&Ta
1846 block macro.
1847 The tab cell delimiter may only be used within the
1848 .Sx \&It
1849 line itself; on following lines, only the
1850 .Sx \&Ta
1851 macro can be used to delimit cells, and
1852 .Sx \&Ta
1853 is only recognised as a macro when called by other macros,
1854 not as the first macro on a line.
1855 .Pp
1856 Note that quoted strings may span tab-delimited cells on an
1857 .Sx \&It
1858 line.
1859 For example,
1860 .Pp
1861 .Dl .It \((dqcol1 ; <TAB> col2 ;\((dq \&;
1862 .Pp
1863 will preserve the semicolon whitespace except for the last.
1864 .Pp
1865 See also
1866 .Sx \&B1 .
1867 .Ss \&Lb
1868 Specify a library.
1869 The syntax is as follows:
1870 .Pp
1871 .Dl Pf \. Sx \&Lb Ar library
1872 .Pp
1873 The
1874 .Ar library
1875 parameter may be a system library, such as
1876 .Cm libz
1877 or
1878 .Cm libpam ,
1879 in which case a small library description is printed next to the linker
1880 invocation; or a custom library, in which case the library name is
1881 printed in quotes.
1882 This is most commonly used in the
1883 .Em SYNOPSIS
1884 section as described in
1885 .Sx MANUAL STRUCTURE .
1886 .Pp

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1887 Examples:
1888 .Dl \&.Lb libz
1889 .Dl \&.Lb mdoc
1890 .Ss \&Li
1891 Denotes text that should be in a
1892 .Li literal
1893 font mode.
1894 Note that this is a presentation term and should not be used for
1895 stylistically decorating technical terms.
1896 .Pp
1897 On terminal output devices, this is often indistinguishable from
1898 normal text.
1899 .Pp
1900 See also
1901 .Sx \&Bf ,
1902 .Sx \&Em ,
1903 .Sx \&No ,
1904 and
1905 .Sx \&Sy .
1906 .Ss \&Lk
1907 Format a hyperlink.
1908 Its syntax is as follows:
1909 .Pp
1910 .Dl Pf \. Sx \&Lk Ar uri Op Ar name
1911 .Pp
1912 Examples:
1913 .Dl \&.Lk http://bsd.lv \((dqThe BSD.lv Project\((dq
1914 .Dl \&.Lk http://bsd.lv
1915 .Pp
1916 See also
1917 .Sx \&Mt .
1918 .Ss \&Lp
1919 Synonym for
1920 .Sx \&Pp .
1921 .Ss \&Ms
1922 Display a mathematical symbol.
1923 Its syntax is as follows:
1924 .Pp
1925 .Dl Pf \. Sx \&Ms Ar symbol
1926 .Pp
1927 Examples:
1928 .Dl \&.Ms sigma
1929 .Dl \&.Ms aleph
1930 .Ss \&Mt
1931 Format a
1932 .Dq mailto:
1933 hyperlink.
1934 Its syntax is as follows:
1935 .Pp
1936 .Dl Pf \. Sx \&Mt Ar address
1937 .Pp
1938 Examples:
1939 .Dl \&.Mt discuss@manpages.bsd.lv
1940 .Ss \&Nd
1941 A one line description of the manual's content.
1942 This may only be invoked in the
1943 .Em SYNOPSIS
1944 section subsequent the
1945 .Sx \&Nm
1946 macro.
1947 .Pp
1948 Examples:
1949 .Dl Pf . Sx \&Nd mdoc language reference
1950 .Dl Pf . Sx \&Nd format and display UNIX manuals
1951 .Pp
1952 The

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1953 .Sx \&Nd
1954 macro technically accepts child macros and terminates with a subsequent
1955 .Sx \&Sh
1956 invocation.
1957 Do not assume this behaviour: some
1958 .Xr whatis 1
1959 database generators are not smart enough to parse more than the line
1960 arguments and will display macros verbatim.
1961 .Pp
1962 See also
1963 .Sx \&Nm .
1964 .Ss \&Nm
1965 The name of the manual page, or \&em in particular in section 1
1966 and 1M pages \&em of an additional command or feature documented in
1967 the manual page.
1968 When first invoked, the
1969 .Sx \&Nm
1970 macro expects a single argument, the name of the manual page.
1971 Usually, the first invocation happens in the
1972 .Em NAME
1973 section of the page.
1974 The specified name will be remembered and used whenever the macro is
1975 called again without arguments later in the page.
1976 The
1977 .Sx \&Nm
1978 macro uses
1979 .Sx Block full-implicit
1980 semantics when invoked as the first macro on an input line in the
1981 .Em SYNOPSIS
1982 section; otherwise, it uses ordinary
1983 .Sx In-line
1984 semantics.
1985 .Pp
1986 Examples:
1987 .Bd -literal -offset indent
1988 \&.Sh SYNOPSIS
1989 \&.Nm cat
1990 \&.Op Fl benstuv
1991 \&.Op Ar
1992 .Ed
1993 .Pp
1994 In the
1995 .Em SYNOPSIS
1996 of section 2, 3 and 9 manual pages, use the
1997 .Sx \&Fn
1998 macro rather than
1999 .Sx \&Nm
2000 to mark up the name of the manual page.
2001 .Ss \&No
2002 Normal text.
2003 Closes the scope of any preceding in-line macro.
2004 When used after physical formatting macros like
2005 .Sx \&Em
2006 or
2007 .Sx \&Sy ,
2008 switches back to the standard font face and weight.
2009 Can also be used to embed plain text strings in macro lines
2010 using semantic annotation macros.
2011 .Pp
2012 Examples:
2013 .Dl ".Em italic , Sy bold , No and roman"
2014 .Pp
2015 .Bd -literal -offset indent -compact
2016 \&.Sm off
2017 \&.Cm :C No / Ar pattern No / Ar replacement No /
2018 \&.Sm on

```

```

2019 .Ed
2020 .Pp
2021 See also
2022 .Sx \&Em ,
2023 .Sx \&Li ,
2024 and
2025 .Sx \&Sy .
2026 .Ss \&Ns
2027 Suppress a space between the output of the preceding macro
2028 and the following text or macro.
2029 Following invocation, input is interpreted as normal text
2030 just like after an
2031 .Sx \&No
2032 macro.
2033 .Pp
2034 This has no effect when invoked at the start of a macro line.
2035 .Pp
2036 Examples:
2037 .Dl ".Ar name Ns = Ns Ar value"
2038 .Dl ".Cm :M Ns Ar pattern"
2039 .Dl ".Fl o Ns Ar output"
2040 .Pp
2041 See also
2042 .Sx \&No
2043 and
2044 .Sx \&Sm .
2045 .Ss \&Nx
2046 Format the
2047 .Nx
2048 version provided as an argument, or a default value if
2049 no argument is provided.
2050 .Pp
2051 Examples:
2052 .Dl \&.Nx 5.01
2053 .Dl \&.Nx
2054 .Pp
2055 See also
2056 .Sx \&At ,
2057 .Sx \&Bsx ,
2058 .Sx \&Bx ,
2059 .Sx \&Dx ,
2060 .Sx \&Fx ,
2061 .Sx \&Ox ,
2062 and
2063 .Sx \&Ux .
2064 .Ss \&Oc
2065 Close multi-line
2066 .Sx \&Oo
2067 context.
2068 .Ss \&Oo
2069 Multi-line version of
2070 .Sx \&Op .
2071 .Pp
2072 Examples:
2073 .Bd -literal -offset indent -compact
2074 \&.Oo
2075 \&.Op Fl flag Ns Ar value
2076 \&.Oc
2077 .Ed
2078 .Ss \&Op
2079 Optional part of a command line.
2080 Prints the argument(s) in brackets.
2081 This is most often used in the
2082 .Em SYNOPSIS
2083 section of section 1 and 1M manual pages.
2084 .Pp

```



```

2085 Examples:
2086 .Dl \&.Op \&Fl a \&Ar b
2087 .Dl \&.Op \&Ar a | b
2088 .Pp
2089 See also
2090 .Sx \&Oo .
2091 .Ss \&Os
2092 Document operating system version.
2093 This is the mandatory third macro of
2094 any
2095 .Nm
2096 file.
2097 Its syntax is as follows:
2098 .Pp
2099 .Dl Pf \. Sx \&Os Op Ar system Op Ar version
2100 .Pp
2101 The optional
2102 .Ar system
2103 parameter specifies the relevant operating system or environment.
2104 Left unspecified, it defaults to the local operating system version.
2105 This is the suggested form.
2106 .Pp
2107 Examples:
2108 .Dl \&.Os
2109 .Dl \&.Os KTH/CSC/TCS
2110 .Dl \&.Os BSD 4.3
2111 .Pp
2112 See also
2113 .Sx \&Dd
2114 and
2115 .Sx \&Dt .
2116 .Ss \&Ot
2117 This macro is obsolete and not implemented in
2118 .Xr mandoc 1 .
2119 .Pp
2120 Historical
2121 .Xr mdoc 5
2122 packages described it as
2123 .Dq "old function type (FORTRAN)" .
2124 .Ss \&Ox
2125 Format the
2126 .Ox
2127 version provided as an argument, or a default value
2128 if no argument is provided.
2129 .Pp
2130 Examples:
2131 .Dl \&.Ox 4.5
2132 .Dl \&.Ox
2133 .Pp
2134 See also
2135 .Sx \&At ,
2136 .Sx \&Bsx ,
2137 .Sx \&Bx ,
2138 .Sx \&Dx ,
2139 .Sx \&Fx ,
2140 .Sx \&Nx ,
2141 and
2142 .Sx \&Ux .
2143 .Ss \&Pa
2144 An absolute or relative file system path, or a file or directory name.
2145 If an argument is not provided, the character
2146 .Sq \{(ti
2147 is used as a default.
2148 .Pp
2149 Examples:
2150 .Dl \&.Pa /usr/bin/mandoc

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2151 .Dl \&.Pa /usr/share/man/man5/mdoc.5
2152 .Pp
2153 See also
2154 .Sx \&Lk .
2155 .Ss \&Pc
2156 Close parenthesised context opened by
2157 .Sx \&Po .
2158 .Ss \&Pf
2159 Removes the space between its argument
2160 .Pq Dq prefix
2161 and the following macro.
2162 Its syntax is as follows:
2163 .Pp
2164 .Dl .Pf Ar prefix macro arguments ...
2165 .Pp
2166 This is equivalent to:
2167 .Pp
2168 .Dl .No Ar prefix No \&Ns Ar macro arguments ...
2169 .Pp
2170 Examples:
2171 .Dl ".Pf $ Ar variable_name"
2172 .Dl ".Pf 0x Ar hex_digits"
2173 .Pp
2174 See also
2175 .Sx \&Ns
2176 and
2177 .Sx \&Sm .
2178 .Ss \&Po
2179 Multi-line version of
2180 .Sx \&Pq .
2181 .Ss \&Pp
2182 Break a paragraph.
2183 This will assert vertical space between prior and subsequent macros
2184 and/or text.
2185 .Pp
2186 Paragraph breaks are not needed before or after
2187 .Sx \&Sh
2188 or
2189 .Sx \&Ss
2190 macros or before displays
2191 .Pq Sx \&Bd
2192 or lists
2193 .Pq Sx \&Bl
2194 unless the
2195 .Fl compact
2196 flag is given.
2197 .Ss \&Pq
2198 Parenthesised enclosure.
2199 .Pp
2200 See also
2201 .Sx \&Po .
2202 .Ss \&Qc
2203 Close quoted context opened by
2204 .Sx \&Qo .
2205 .Ss \&Ql
2206 Format a single-quoted literal.
2207 See also
2208 .Sx \&Qq
2209 and
2210 .Sx \&Sq .
2211 .Ss \&Qo
2212 Multi-line version of
2213 .Sx \&Qq .
2214 .Ss \&Qq
2215 Encloses its arguments in
2216 .Qq typewriter

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```

2217 double-quotes.
2218 Consider using
2219 .Sx \&Dq .
2220 .Pp
2221 See also
2222 .Sx \&Dq ,
2223 .Sx \&Sq ,
2224 and
2225 .Sx \&Qo .
2226 .Ss \&Re
2227 Close an
2228 .Sx \&Rs
2229 block.
2230 Does not have any tail arguments.
2231 .Ss \&Rs
2232 Begin a bibliographic
2233 .Pq Dq reference
2234 block.
2235 Does not have any head arguments.
2236 The block macro may only contain
2237 .Sx \&%A ,
2238 .Sx \&%B ,
2239 .Sx \&%C ,
2240 .Sx \&%D ,
2241 .Sx \&%I ,
2242 .Sx \&%J ,
2243 .Sx \&%N ,
2244 .Sx \&%O ,
2245 .Sx \&%P ,
2246 .Sx \&%Q ,
2247 .Sx \&%R ,
2248 .Sx \&%T ,
2249 .Sx \&%U ,
2250 and
2251 .Sx \&%V
2252 child macros (at least one must be specified).
2253 .Pp
2254 Examples:
2255 .Bd -literal -offset indent -compact
2256 \&.Rs
2257 \&.%A J. E. Hopcroft
2258 \&.%A J. D. Ullman
2259 \&.%B Introduction to Automata Theory, Languages, and Computation
2260 \&.%I Addison-Wesley
2261 \&.%C Reading, Massachusettes
2262 \&.%D 1979
2263 \&.Re
2264 .Ed
2265 .Pp
2266 If an
2267 .Sx \&Rs
2268 block is used within a SEE ALSO section, a vertical space is asserted
2269 before the rendered output, else the block continues on the current
2270 line.
2271 .Ss \&Rv
2272 Insert a standard sentence regarding a function call's return value of 0
2273 on success and \-1 on error, with the
2274 .Va errno
2275 libc global variable set on error.
2276 Its syntax is as follows:
2277 .Pp
2278 .Dl Pf \. Sx \&Rv Fl std Op Ar function ...
2279 .Pp
2280 If
2281 .Ar function
2282 is not specified, the document's name set by

```

```

2283 .Sx \&Nm
2284 is used.
2285 Multiple
2286 .Ar function
2287 arguments are treated as separate functions.
2288 .Pp
2289 See also
2290 .Sx \&Ex .
2291 .Ss \&Sc
2292 Close single-quoted context opened by
2293 .Sx \&So .
2294 .Ss \&Sh
2295 Begin a new section.
2296 For a list of conventional manual sections, see
2297 .Sx MANUAL STRUCTURE .
2298 These sections should be used unless it's absolutely necessary that
2299 custom sections be used.
2300 .Pp
2301 Section names should be unique so that they may be keyed by
2302 .Sx \&Sx .
2303 Although this macro is parsed, it should not consist of child node or it
2304 may not be linked with
2305 .Sx \&Sx .
2306 .Pp
2307 See also
2308 .Sx \&Pp ,
2309 .Sx \&Ss ,
2310 and
2311 .Sx \&Sx .
2312 .Ss \&Sm
2313 Switches the spacing mode for output generated from macros.
2314 Its syntax is as follows:
2315 .Pp
2316 .Dl Pf \. Sx \&Sm Cm on | off
2317 .Pp
2318 By default, spacing is
2319 .Cm on .
2320 When switched
2321 .Cm off ,
2322 no white space is inserted between macro arguments and between the
2323 output generated from adjacent macros, but text lines
2324 still get normal spacing between words and sentences.
2325 .Ss \&So
2326 Multi-line version of
2327 .Sx \&Sq .
2328 .Ss \&Sq
2329 Encloses its arguments in
2330 .Sq typewriter
2331 single-quotes.
2332 .Pp
2333 See also
2334 .Sx \&Dq ,
2335 .Sx \&Qq ,
2336 and
2337 .Sx \&So .
2338 .Ss \&Ss
2339 Begin a new subsection.
2340 Unlike with
2341 .Sx \&Sh ,
2342 there is no convention for the naming of subsections.
2343 Except
2344 .Em DESCRIPTION ,
2345 the conventional sections described in
2346 .Sx MANUAL STRUCTURE
2347 rarely have subsections.
2348 .Pp

```

2349 Sub-section names should be unique so that they may be keyed by
 2350 .Sx \&Sx .
 2351 Although this macro is parsed, it should not consist of child node or it
 2352 may not be linked with
 2353 .Sx \&Sx .
 2354 .Pp
 2355 See also
 2356 .Sx \&Pp ,
 2357 .Sx \&Sh ,
 2358 and
 2359 .Sx \&Sx .
 2360 .Ss \&St
 2361 Replace an abbreviation for a standard with the full form.
 2362 The following standards are recognised:
 2363 .Pp
 2364 .Bl -tag -width "-p1003.1g-2000X" -compact
 2365 .It \-p1003.1-88
 2366 .St -p1003.1-88
 2367 .It \-p1003.1-90
 2368 .St -p1003.1-90
 2369 .It \-p1003.1-96
 2370 .St -p1003.1-96
 2371 .It \-p1003.1-2001
 2372 .St -p1003.1-2001
 2373 .It \-p1003.1-2004
 2374 .St -p1003.1-2004
 2375 .It \-p1003.1-2008
 2376 .St -p1003.1-2008
 2377 .It \-p1003.1
 2378 .St -p1003.1
 2379 .It \-p1003.1b
 2380 .St -p1003.1b
 2381 .It \-p1003.1b-93
 2382 .St -p1003.1b-93
 2383 .It \-p1003.1c-95
 2384 .St -p1003.1c-95
 2385 .It \-p1003.1g-2000
 2386 .St -p1003.1g-2000
 2387 .It \-p1003.1i-95
 2388 .St -p1003.1i-95
 2389 .It \-p1003.2-92
 2390 .St -p1003.2-92
 2391 .It \-p1003.2a-92
 2392 .St -p1003.2a-92
 2393 .It \-p1387.2-95
 2394 .St -p1387.2-95
 2395 .It \-p1003.2
 2396 .St -p1003.2
 2397 .It \-p1387.2
 2398 .St -p1387.2
 2399 .It \-isoC
 2400 .St -isoC
 2401 .It \-isoC-90
 2402 .St -isoC-90
 2403 .It \-isoC-amd1
 2404 .St -isoC-amd1
 2405 .It \-isoC-tcor1
 2406 .St -isoC-tcor1
 2407 .It \-isoC-tcor2
 2408 .St -isoC-tcor2
 2409 .It \-isoC-99
 2410 .St -isoC-99
 2411 .It \-isoC-2011
 2412 .St -isoC-2011
 2413 .It \-iso9945-1-90
 2414 .St -iso9945-1-90

2415 .It \-iso9945-1-96
 2416 .St -iso9945-1-96
 2417 .It \-iso9945-2-93
 2418 .St -iso9945-2-93
 2419 .It \-ansiC
 2420 .St -ansiC
 2421 .It \-ansiC-89
 2422 .St -ansiC-89
 2423 .It \-ansiC-99
 2424 .St -ansiC-99
 2425 .It \-ieee754
 2426 .St -ieee754
 2427 .It \-iso8802-3
 2428 .St -iso8802-3
 2429 .It \-iso8601
 2430 .St -iso8601
 2431 .It \-ieee1275-94
 2432 .St -ieee1275-94
 2433 .It \-xpg3
 2434 .St -xpg3
 2435 .It \-xpg4
 2436 .St -xpg4
 2437 .It \-xpg4.2
 2438 .St -xpg4.2
 2439 .It \-xpg4.3
 2440 .St -xpg4.3
 2441 .It \-xbd5
 2442 .St -xbd5
 2443 .It \-xcu5
 2444 .St -xcu5
 2445 .It \-xsh5
 2446 .St -xsh5
 2447 .It \-xns5
 2448 .St -xns5
 2449 .It \-xns5.2
 2450 .St -xns5.2
 2451 .It \-xns5.2d2.0
 2452 .St -xns5.2d2.0
 2453 .It \-xcurses4.2
 2454 .St -xcurses4.2
 2455 .It \-susv2
 2456 .St -susv2
 2457 .It \-susv3
 2458 .St -susv3
 2459 .It \-svid4
 2460 .St -svid4
 2461 .El
 2462 .Ss \&Sx
 2463 Reference a section or subsection in the same manual page.
 2464 The referenced section or subsection name must be identical to the
 2465 enclosed argument, including whitespace.
 2466 .Pp
 2467 Examples:
 2468 .Dl \&Sx MANUAL STRUCTURE
 2469 .Pp
 2470 See also
 2471 .Sx \&Sh
 2472 and
 2473 .Sx \&Ss .
 2474 .Ss \&Sy
 2475 Format enclosed arguments in symbolic
 2476 .Pq Dq boldface .
 2477 Note that this is a presentation term and should not be used for
 2478 stylistically decorating technical terms.
 2479 .Pp
 2480 See also

```

2481 .Sx \&Bf ,
2482 .Sx \&Em ,
2483 .Sx \&Li ,
2484 and
2485 .Sx \&No .
2486 .Ss \&Ta .
2487 Table cell separator in
2488 .Sx \&Bl Fl column
2489 lists; can only be used below
2490 .Sx \&It .
2491 .Ss \&Tn
2492 Format a tradename.
2493 .Pp
2494 Since this macro is often implemented to use a small caps font,
2495 it has historically been used for acronyms (like ASCII) as well.
2496 Such usage is not recommended because it would use the same macro
2497 sometimes for semantical annotation, sometimes for physical formatting.
2498 .Pp
2499 Examples:
2500 .Dl \&Tn IBM
2501 .Ss \&Ud
2502 Prints out
2503 .Dq currently under development.
2504 .Ss \&Ux
2505 Format the UNIX name.
2506 Accepts no argument.
2507 .Pp
2508 Examples:
2509 .Dl \&Ux
2510 .Pp
2511 See also
2512 .Sx \&At ,
2513 .Sx \&Bsx ,
2514 .Sx \&Bx ,
2515 .Sx \&Dx ,
2516 .Sx \&Fx ,
2517 .Sx \&Nx ,
2518 and
2519 .Sx \&Ox .
2520 .Ss \&Va
2521 A variable name.
2522 .Pp
2523 Examples:
2524 .Dl \&Va foo
2525 .Dl \&Va const char *bar ;
2526 .Ss \&Vt
2527 A variable type.
2528 This is also used for indicating global variables in the
2529 .Em SYNOPSIS
2530 section, in which case a variable name is also specified.
2531 Note that it accepts
2532 .Sx Block partial-implicit
2533 syntax when invoked as the first macro on an input line in the
2534 .Em SYNOPSIS
2535 section, else it accepts ordinary
2536 .Sx In-line
2537 syntax.
2538 In the former case, this macro starts a new output line,
2539 and a blank line is inserted in front if there is a preceding
2540 function definition or include directive.
2541 .Pp
2542 Note that this should not be confused with
2543 .Sx \&Ft ,
2544 which is used for function return types.
2545 .Pp
2546 Examples:

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2547 .Dl \&Vt unsigned char
2548 .Dl \&Vt extern const char * const sys_signame[] \&;
2549 .Pp
2550 See also
2551 .Sx MANUAL STRUCTURE
2552 and
2553 .Sx \&Va .
2554 .Ss \&Xc
2555 Close a scope opened by
2556 .Sx \&Xo .
2557 .Ss \&Xo
2558 Extend the header of an
2559 .Sx \&It
2560 macro or the body of a partial-implicit block macro
2561 beyond the end of the input line.
2562 This macro originally existed to work around the 9-argument limit
2563 of historic
2564 .Xr roff 5 .
2565 .Ss \&Xr
2566 Link to another manual
2567 .Pq Qq cross-reference .
2568 Its syntax is as follows:
2569 .Pp
2570 .Dl Pf \. Sx \&Xr Ar name section
2571 .Pp
2572 The
2573 .Ar name
2574 and
2575 .Ar section
2576 are the name and section of the linked manual.
2577 If
2578 .Ar section
2579 is followed by non-punctuation, an
2580 .Sx \&Ns
2581 is inserted into the token stream.
2582 This behaviour is for compatibility with
2583 GNU troff.
2584 .Pp
2585 Examples:
2586 .Dl \&.Xr mandoc 1
2587 .Dl \&.Xr mandoc 1 \&;
2588 .Dl \&.Xr mandoc 1 \&Ns s behaviour
2589 .Ss \&br
2590 Emits a line-break.
2591 This macro should not be used; it is implemented for compatibility with
2592 historical manuals.
2593 .Pp
2594 Consider using
2595 .Sx \&Pp
2596 in the event of natural paragraph breaks.
2597 .Ss \&sp
2598 Emits vertical space.
2599 This macro should not be used; it is implemented for compatibility with
2600 historical manuals.
2601 Its syntax is as follows:
2602 .Pp
2603 .Dl Pf \. Sx \&sp Op Ar height
2604 .Pp
2605 The
2606 .Ar height
2607 argument must be formatted as described in
2608 .Sx Scaling Widths .
2609 If unspecified,
2610 .Sx \&sp
2611 asserts a single vertical space.
2612 .Sh MACRO SYNTAX

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2613 The syntax of a macro depends on its classification.
2614 In this section,
2615 .Sq \-arg
2616 refers to macro arguments, which may be followed by zero or more
2617 .Sq parm
2618 parameters;
2619 .Sq \&Yo
2620 opens the scope of a macro; and if specified,
2621 .Sq \&Yc
2622 closes it out.
2623 .Pp
2624 The
2625 .Em Callable
2626 column indicates that the macro may also be called by passing its name
2627 as an argument to another macro.
2628 For example,
2629 .Sq \&.Op \&Fl O \&Ar file
2630 produces
2631 .Sq Op Fl O Ar file .
2632 To prevent a macro call and render the macro name literally,
2633 escape it by prepending a zero-width space,
2634 .Sq \e .
2635 For example,
2636 .Sq \&Op \e&Fl O
2637 produces
2638 .Sq Op \&Fl O .
2639 If a macro is not callable but its name appears as an argument
2640 to another macro, it is interpreted as opaque text.
2641 For example,
2642 .Sq \&.Fl \&Sh
2643 produces
2644 .Sq Fl \&Sh .
2645 .Pp
2646 The
2647 .Em Parsed
2648 column indicates whether the macro may call other macros by receiving
2649 their names as arguments.
2650 If a macro is not parsed but the name of another macro appears
2651 as an argument, it is interpreted as opaque text.
2652 .Pp
2653 The
2654 .Em Scope
2655 column, if applicable, describes closure rules.
2656 .Ss Block full-explicit
2657 Multi-line scope closed by an explicit closing macro.
2658 All macros contains bodies; only
2659 .Sx \&Bf
2660 and
2661 .Pq optionally
2662 .Sx \&Bl
2663 contain a head.
2664 .Bd -literal -offset indent
2665 \&.Yo \(\lB\arg \(\lBparm...\(rB\(\lBhead...\(rB
2666 \(\lBbody...\(rB
2667 \&.Yc
2668 .Ed
2669 .Bl -column "MacroX" "CallableX" "ParsedX" "closed by XXX" -offset indent
2670 .It Em Macro Ta Em Callable Ta Em Parsed Ta Em Scope
2671 .It Sx \&Bd Ta \&No Ta \&No Ta closed by Sx \&Ed
2672 .It Sx \&Bf Ta \&No Ta \&No Ta closed by Sx \&Ef
2673 .It Sx \&Bk Ta \&No Ta \&No Ta closed by Sx \&Ek
2674 .It Sx \&Bl Ta \&No Ta \&No Ta closed by Sx \&El
2675 .It Sx \&Ed Ta \&No Ta \&No Ta opened by Sx \&Bd
2676 .It Sx \&Ef Ta \&No Ta \&No Ta opened by Sx \&Bf
2677 .It Sx \&Ek Ta \&No Ta \&No Ta opened by Sx \&Bk
2678 .It Sx \&El Ta \&No Ta \&No Ta opened by Sx \&Bl

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2679 .El
2680 .Ss Block full-implicit
2681 Multi-line scope closed by end-of-file or implicitly by another macro.
2682 All macros have bodies; some
2683 .Po
2684 .Sx \&It Fl bullet ,
2685 .Fl hyphen ,
2686 .Fl dash ,
2687 .Fl enum ,
2688 .Fl item
2689 .Pc
2690 don't have heads; only one
2691 .Po
2692 .Sx \&It
2693 in
2694 .Sx \&Bl Fl column
2695 .Pc
2696 has multiple heads.
2697 .Bd -literal -offset indent
2698 \&.Yo \(\lB\arg \(\lBparm...\(rB\(\lBhead...\(lBta head...\(rB\(\lB
2699 \(\lBbody...\(rB
2700 .Ed
2701 .Bl -column "MacroX" "CallableX" "ParsedX" "closed by XXXXXXXXXX" -offset inden
2702 .It Em Macro Ta Em Callable Ta Em Parsed Ta Em Scope
2703 .It Sx \&It Ta \&No Ta Yes Ta closed by Sx \&It , Sx \&El
2704 .It Sx \&Nd Ta \&No Ta \&No Ta closed by Sx \&Sh
2705 .It Sx \&Nm Ta \&No Ta Yes Ta closed by Sx \&Nm , Sx \&Sh , Sx \&Ss
2706 .It Sx \&Sh Ta \&No Ta Yes Ta closed by Sx \&Sh
2707 .It Sx \&Ss Ta \&No Ta Yes Ta closed by Sx \&Sh , Sx \&Ss
2708 .El
2709 .Pp
2710 Note that the
2711 .Sx \&Nm
2712 macro is a
2713 .Sx Block full-implicit
2714 macro only when invoked as the first macro
2715 in a
2716 .Em SYNOPSIS
2717 section line, else it is
2718 .Sx In-line .
2719 .Ss Block partial-explicit
2720 Like block full-explicit, but also with single-line scope.
2721 Each has at least a body and, in limited circumstances, a head
2722 .Po
2723 .Sx \&Fo ,
2724 .Sx \&Eo
2725 .Pc
2726 and/or tail
2727 .Pq Sx \&Ec .
2728 .Bd -literal -offset indent
2729 \&.Yo \(\lB\arg \(\lBparm...\(rB\(\lBhead...\(rB
2730 \(\lBbody...\(rB
2731 \&.Yc \(\lBtail...\(rB

2733 \&.Yo \(\lB\arg \(\lBparm...\(rB\(\lBhead...\(rB \
2734 \(\lBbody...\(rB \&Yc \(\lBtail...\(rB
2735 .Ed
2736 .Bl -column "MacroX" "CallableX" "ParsedX" "closed by XXXX" -offset indent
2737 .It Em Macro Ta Em Callable Ta Em Parsed Ta Em Scope
2738 .It Sx \&Ac Ta Yes Ta Yes Ta opened by Sx \&Ao
2739 .It Sx \&Ao Ta Yes Ta Yes Ta closed by Sx \&Ac
2740 .It Sx \&Bc Ta Yes Ta Yes Ta closed by Sx \&Bo
2741 .It Sx \&Bo Ta Yes Ta Yes Ta opened by Sx \&Bc
2742 .It Sx \&Brc Ta Yes Ta Yes Ta opened by Sx \&Bro
2743 .It Sx \&Bro Ta Yes Ta Yes Ta closed by Sx \&Brc
2744 .It Sx \&Dc Ta Yes Ta Yes Ta opened by Sx \&Do

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2745 .It Sx \&Do Ta Yes Ta Yes Ta closed by Sx \&Dc
2746 .It Sx \&Ec Ta Yes Ta Yes Ta opened by Sx \&Eo
2747 .It Sx \&Eo Ta Yes Ta Yes Ta closed by Sx \&Ec
2748 .It Sx \&Fc Ta Yes Ta Yes Ta opened by Sx \&Fo
2749 .It Sx \&Fo Ta \&No Ta \&No Ta closed by Sx \&Fc
2750 .It Sx \&Oc Ta Yes Ta Yes Ta closed by Sx \&Oo
2751 .It Sx \&Oo Ta Yes Ta Yes Ta opened by Sx \&Oc
2752 .It Sx \&Pc Ta Yes Ta Yes Ta closed by Sx \&Po
2753 .It Sx \&Po Ta Yes Ta Yes Ta opened by Sx \&Pc
2754 .It Sx \&Qc Ta Yes Ta Yes Ta opened by Sx \&Oo
2755 .It Sx \&Qo Ta Yes Ta Yes Ta closed by Sx \&Oc
2756 .It Sx \&Re Ta \&No Ta \&No Ta opened by Sx \&Rs
2757 .It Sx \&Rs Ta \&No Ta \&No Ta closed by Sx \&Re
2758 .It Sx \&Sc Ta Yes Ta Yes Ta opened by Sx \&So
2759 .It Sx \&So Ta Yes Ta Yes Ta closed by Sx \&Sc
2760 .It Sx \&Xc Ta Yes Ta Yes Ta opened by Sx \&Xo
2761 .It Sx \&Xo Ta Yes Ta Yes Ta closed by Sx \&Xc
2762 .El
2763 .Ss Block partial-implicit
2764 Like block full-implicit, but with single-line scope closed by the
2765 end of the line.
2766 .Bd -literal -offset indent
2767 \&.Yo \(\lB\~arg \(\lBval...\(rB\(\lBbody...\(rB \(\lBres...\(rB
2768 .Ed
2769 .Bl -column "MacroX" "CallableX" "ParsedX" -offset indent
2770 .It Em Macro Ta Em Callable Ta Em Parsed
2771 .It Sx \&Aq Ta Yes Ta Yes
2772 .It Sx \&Bq Ta Yes Ta Yes
2773 .It Sx \&Brq Ta Yes Ta Yes
2774 .It Sx \&Dl Ta \&No Ta \&Yes
2775 .It Sx \&Dl Ta \&No Ta Yes
2776 .It Sx \&Dq Ta Yes Ta Yes
2777 .It Sx \&Op Ta Yes Ta Yes
2778 .It Sx \&Pq Ta Yes Ta Yes
2779 .It Sx \&Ql Ta Yes Ta Yes
2780 .It Sx \&Qq Ta Yes Ta Yes
2781 .It Sx \&Sq Ta Yes Ta Yes
2782 .It Sx \&Vt Ta Yes Ta Yes
2783 .El
2784 .Pp
2785 Note that the
2786 .Sx \&Vt
2787 macro is a
2788 .Sx Block partial-implicit
2789 only when invoked as the first macro
2790 in a
2791 .Em SYNOPSIS
2792 section line, else it is
2793 .Sx In-line .
2794 .Ss Special block macro
2795 The
2796 .Sx \&Ta
2797 macro can only be used below
2798 .Sx \&It
2799 in
2800 .Sx \&Bl Fl column
2801 lists.
2802 It delimits blocks representing table cells;
2803 these blocks have bodies, but no heads.
2804 .Bl -column "MacroX" "CallableX" "ParsedX" "closed by XXXX" -offset indent
2805 .It Em Macro Ta Em Callable Ta Em Parsed Ta Em Scope
2806 .It Sx \&Ta Ta Yes Ta Yes Ta closed by Sx \&Ta , Sx \&It
2807 .El
2808 .Ss In-line
2809 Closed by the end of the line, fixed argument lengths,
2810 and/or subsequent macros.

```

```

2811 In-line macros have only text children.
2812 If a number (or inequality) of arguments is
2813 .Pq n ,
2814 then the macro accepts an arbitrary number of arguments.
2815 .Bd -literal -offset indent
2816 \&.Yo \(\lB\~arg \(\lBval...\(rB\(\lBargs...\(rB \(\lBres...\(rB

2818 \&.Yo \(\lB\~arg \(\lBval...\(rB\(\lBargs...\(rB Yc...

2820 \&.Yo \(\lB\~arg \(\lBval...\(rB\(\lB arg0 arg1 argN
2821 .Ed
2822 .Bl -column "MacroX" "CallableX" "ParsedX" "Arguments" -offset indent
2823 .It Em Macro Ta Em Callable Ta Em Parsed Ta Em Arguments
2824 .It Sx \&%A Ta \&No Ta \&No Ta >0
2825 .It Sx \&%B Ta \&No Ta \&No Ta >0
2826 .It Sx \&%C Ta \&No Ta \&No Ta >0
2827 .It Sx \&%D Ta \&No Ta \&No Ta >0
2828 .It Sx \&%I Ta \&No Ta \&No Ta >0
2829 .It Sx \&%J Ta \&No Ta \&No Ta >0
2830 .It Sx \&%N Ta \&No Ta \&No Ta >0
2831 .It Sx \&%O Ta \&No Ta \&No Ta >0
2832 .It Sx \&%P Ta \&No Ta \&No Ta >0
2833 .It Sx \&%Q Ta \&No Ta \&No Ta >0
2834 .It Sx \&%R Ta \&No Ta \&No Ta >0
2835 .It Sx \&%T Ta \&No Ta \&No Ta >0
2836 .It Sx \&%U Ta \&No Ta \&No Ta >0
2837 .It Sx \&%V Ta \&No Ta \&No Ta >0
2838 .It Sx \&%Ad Ta Yes Ta Yes Ta >0
2839 .It Sx \&%An Ta Yes Ta Yes Ta >0
2840 .It Sx \&%Ap Ta Yes Ta Yes Ta 0
2841 .It Sx \&%Ar Ta Yes Ta Yes Ta n
2842 .It Sx \&%At Ta Yes Ta Yes Ta 1
2843 .It Sx \&%Bsx Ta Yes Ta Yes Ta n
2844 .It Sx \&%Bt Ta \&No Ta \&No Ta 0
2845 .It Sx \&%Bx Ta Yes Ta Yes Ta n
2846 .It Sx \&%Cd Ta Yes Ta Yes Ta >0
2847 .It Sx \&%Cm Ta Yes Ta Yes Ta >0
2848 .It Sx \&%Db Ta \&No Ta \&No Ta 1
2849 .It Sx \&%Dd Ta \&No Ta \&No Ta n
2850 .It Sx \&%Dt Ta \&No Ta \&No Ta n
2851 .It Sx \&%Dv Ta Yes Ta Yes Ta >0
2852 .It Sx \&%Dx Ta Yes Ta Yes Ta n
2853 .It Sx \&%Em Ta Yes Ta Yes Ta >0
2854 .It Sx \&%En Ta \&No Ta \&No Ta 0
2855 .It Sx \&%Er Ta Yes Ta Yes Ta >0
2856 .It Sx \&%Es Ta \&No Ta \&No Ta 0
2857 .It Sx \&%Ev Ta Yes Ta Yes Ta >0
2858 .It Sx \&%Ex Ta \&No Ta \&No Ta n
2859 .It Sx \&%Fa Ta Yes Ta Yes Ta >0
2860 .It Sx \&%Fd Ta \&No Ta \&No Ta >0
2861 .It Sx \&%Fl Ta Yes Ta Yes Ta n
2862 .It Sx \&%Fn Ta Yes Ta Yes Ta >0
2863 .It Sx \&%Fr Ta \&No Ta \&No Ta n
2864 .It Sx \&%Ft Ta Yes Ta Yes Ta >0
2865 .It Sx \&%Fx Ta Yes Ta Yes Ta n
2866 .It Sx \&%Hf Ta \&No Ta \&No Ta n
2867 .It Sx \&%Ic Ta Yes Ta Yes Ta >0
2868 .It Sx \&%In Ta \&No Ta \&No Ta 1
2869 .It Sx \&%Lb Ta \&No Ta \&No Ta 1
2870 .It Sx \&%Li Ta Yes Ta Yes Ta >0
2871 .It Sx \&%Lk Ta Yes Ta Yes Ta >0
2872 .It Sx \&%Lp Ta \&No Ta \&No Ta 0
2873 .It Sx \&%Ms Ta Yes Ta Yes Ta >0
2874 .It Sx \&%Mt Ta Yes Ta Yes Ta >0
2875 .It Sx \&%Nm Ta Yes Ta Yes Ta n
2876 .It Sx \&%No Ta Yes Ta Yes Ta 0

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2877 .It Sx \&Ns Ta Yes Ta Yes Ta 0
2878 .It Sx \&Nx Ta Yes Ta Yes Ta n
2879 .It Sx \&Os Ta \&No Ta \&No Ta n
2880 .It Sx \&Ot Ta \&No Ta \&No Ta n
2881 .It Sx \&Ox Ta Yes Ta Yes Ta n
2882 .It Sx \&Pa Ta Yes Ta Yes Ta n
2883 .It Sx \&Pf Ta Yes Ta Yes Ta 1
2884 .It Sx \&Pp Ta \&No Ta \&No Ta 0
2885 .It Sx \&Rv Ta \&No Ta \&No Ta n
2886 .It Sx \&Sm Ta \&No Ta \&No Ta 1
2887 .It Sx \&St Ta \&No Ta Yes Ta 1
2888 .It Sx \&Sx Ta Yes Ta Yes Ta >0
2889 .It Sx \&Sy Ta Yes Ta Yes Ta >0
2890 .It Sx \&Tn Ta Yes Ta Yes Ta >0
2891 .It Sx \&Ud Ta \&No Ta \&No Ta 0
2892 .It Sx \&Ux Ta Yes Ta Yes Ta n
2893 .It Sx \&Va Ta Yes Ta Yes Ta n
2894 .It Sx \&Vt Ta Yes Ta Yes Ta >0
2895 .It Sx \&Xr Ta Yes Ta Yes Ta >0
2896 .It Sx \&br Ta \&No Ta \&No Ta 0
2897 .It Sx \&sp Ta \&No Ta \&No Ta 1
2898 .El
2899 .Ss Delimiters
2900 When a macro argument consists of one single input character
2901 considered as a delimiter, the argument gets special handling.
2902 This does not apply when delimiters appear in arguments containing
2903 more than one character.
2904 Consequently, to prevent special handling and just handle it
2905 like any other argument, a delimiter can be escaped by prepending
2906 a zero-width space
2907 .Pq Sq \e& .
2908 In text lines, delimiters never need escaping, but may be used
2909 as normal punctuation.
2910 .Pp
2911 For many macros, when the leading arguments are opening delimiters,
2912 these delimiters are put before the macro scope,
2913 and when the trailing arguments are closing delimiters,
2914 these delimiters are put after the macro scope.
2915 For example,
2916 .Pp
2917 .Dl Pf \. \&Aq "( [ word ] ) ."
2918 .Pp
2919 renders as:
2920 .Pp
2921 .Dl Aq ( [ word ] ) .
2922 .Pp
2923 Opening delimiters are:
2924 .Pp
2925 .Bl -tag -width Ds -offset indent -compact
2926 .It \&(
2927 left parenthesis
2928 .It \&[
2929 left bracket
2930 .El
2931 .Pp
2932 Closing delimiters are:
2933 .Pp
2934 .Bl -tag -width Ds -offset indent -compact
2935 .It \&.
2936 period
2937 .It \&,
2938 comma
2939 .It \&:
2940 colon
2941 .It \&;
2942 semicolon

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2943 .It \&)
2944 right parenthesis
2945 .It \&}
2946 right bracket
2947 .It \&?
2948 question mark
2949 .It \&!
2950 exclamation mark
2951 .El
2952 .Pp
2953 Note that even a period preceded by a backslash
2954 .Pq Sq \e.\&
2955 gets this special handling; use
2956 .Sq \e&.
2957 to prevent that.
2958 .Pp
2959 Many in-line macros interrupt their scope when they encounter
2960 delimiters, and resume their scope when more arguments follow that
2961 are not delimiters.
2962 For example,
2963 .Pp
2964 .Dl Pf \. \&Fl "a ( b | c \e*(Ba d ) e"
2965 .Pp
2966 renders as:
2967 .Pp
2968 .Dl Fl a ( b | c \e*(Ba d ) e
2969 .Pp
2970 This applies to both opening and closing delimiters,
2971 and also to the middle delimiter:
2972 .Pp
2973 .Bl -tag -width Ds -offset indent -compact
2974 .It \&|
2975 vertical bar
2976 .El
2977 .Pp
2978 As a special case, the predefined string \e*(Ba is handled and rendered
2979 in the same way as a plain
2980 .Sq \&|
2981 character.
2982 Using this predefined string is not recommended in new manuals.
2983 .Ss Font handling
2984 .In
2985 .Nm
2986 documents, usage of semantic markup is recommended in order to have
2987 proper fonts automatically selected; only when no fitting semantic markup
2988 is available, consider falling back to
2989 .Sx Physical markup
2990 macros.
2991 Whenever any
2992 .Nm
2993 macro switches the
2994 .Xr roff 5
2995 font mode, it will automatically restore the previous font when exiting
2996 its scope.
2997 Manually switching the font using the
2998 .Xr roff 5
2999 .Ql \ef
3000 font escape sequences is never required.
3001 .Sh COMPATIBILITY
3002 This section documents compatibility between mandoc and other other
3003 troff implementations, at this time limited to GNU troff
3004 .Pq Qq groff .
3005 The term
3006 .Qq historic groff
3007 refers to groff versions before 1.17,
3008 which featured a significant update of the

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```

3009 .Pa doc.tmac
3010 file.
3011 .Pp
3012 Heirloom troff, the other significant troff implementation accepting
3013 \-mdoc, is similar to historic groff.
3014 .Pp
3015 The following problematic behaviour is found in groff:
3016 .ds hist (Historic groff only.)
3017 .Pp
3018 .Bl -dash -compact
3019 .It
3020 Display macros
3021 .Po
3022 .Sx \&Bd ,
3023 .Sx \&Dl ,
3024 and
3025 .Sx \&Dl
3026 .Pc
3027 may not be nested.
3028 \*[hist]
3029 .It
3030 .Sx \&At
3031 with unknown arguments produces no output at all.
3032 \*[hist]
3033 Newer groff and mandoc print
3034 .Qq AT&T UNIX
3035 and the arguments.
3036 .It
3037 .Sx \&Bl Fl column
3038 does not recognise trailing punctuation characters when they immediately
3039 precede tabulator characters, but treats them as normal text and
3040 outputs a space before them.
3041 .It
3042 .Sx \&Bd Fl ragged compact
3043 does not start a new line.
3044 \*[hist]
3045 .It
3046 .Sx \&Dd
3047 with non-standard arguments behaves very strangely.
3048 When there are three arguments, they are printed verbatim.
3049 Any other number of arguments is replaced by the current date,
3050 but without any arguments the string
3051 .Dq Epoch
3052 is printed.
3053 .It
3054 .Sx \&Fl
3055 does not print a dash for an empty argument.
3056 \*[hist]
3057 .It
3058 .Sx \&Fn
3059 does not start a new line unless invoked as the line macro in the
3060 .Em SYNOPSIS
3061 section.
3062 \*[hist]
3063 .It
3064 .Sx \&Fo
3065 with
3066 .Pf non- Sx \&Fa
3067 children causes inconsistent spacing between arguments.
3068 In mandoc, a single space is always inserted between arguments.
3069 .It
3070 .Sx \&Ft
3071 in the
3072 .Em SYNOPSIS
3073 causes inconsistent vertical spacing, depending on whether a prior
3074 .Sx \&Fn

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```

3075 has been invoked.
3076 See
3077 .Sx \&Ft
3078 and
3079 .Sx \&Fn
3080 for the normalised behaviour in mandoc.
3081 .It
3082 .Sx \&In
3083 ignores additional arguments and is not treated specially in the
3084 .Em SYNOPSIS .
3085 \*[hist]
3086 .It
3087 .Sx \&It
3088 sometimes requires a
3089 .Fl nested
3090 flag.
3091 \*[hist]
3092 In new groff and mandoc, any list may be nested by default and
3093 .Fl enum
3094 lists will restart the sequence only for the sub-list.
3095 .It
3096 .Sx \&Li
3097 followed by a delimiter is incorrectly used in some manuals
3098 instead of properly quoting that character, which sometimes works with
3099 historic groff.
3100 .It
3101 .Sx \&Lk
3102 only accepts a single link-name argument; the remainder is misformatted.
3103 .It
3104 .Sx \&Pa
3105 does not format its arguments when used in the FILES section under
3106 certain list types.
3107 .It
3108 .Sx \&Ta
3109 can only be called by other macros, but not at the beginning of a line.
3110 .It
3111 .Sx \&%C
3112 is not implemented.
3113 .It
3114 Historic groff only allows up to eight or nine arguments per macro input
3115 line, depending on the exact situation.
3116 Providing more arguments causes garbled output.
3117 The number of arguments on one input line is not limited with mandoc.
3118 .It
3119 Historic groff has many un-callable macros.
3120 Most of these (excluding some block-level macros) are callable
3121 in new groff and mandoc.
3122 .It
3123 .Sq \&(ba
3124 (vertical bar) is not fully supported as a delimiter.
3125 \*[hist]
3126 .It
3127 .Sq \&ef
3128 .Pq font face
3129 and
3130 .Sq \&ef
3131 .Pq font family face
3132 .Sx Text Decoration
3133 escapes behave irregularly when specified within line-macro scopes.
3134 .It
3135 Negative scaling units return to prior lines.
3136 Instead, mandoc truncates them to zero.
3137 .El
3138 .Pp
3139 The following features are unimplemented in mandoc:
3140 .Pp

```


3141 .Bl -dash -compact
3142 .It
3143 .Sx \&Bd
3144 .Fl file Ar file .
3145 .It
3146 .Sx \&Bd
3147 .Fl offset Ar center
3148 and
3149 .Fl offset Ar right .
3150 Groff does not implement centred and flush-right rendering either,
3151 but produces large indentations.
3152 .It
3153 The
3154 .Sq \eh
3155 .Pq horizontal position ,
3156 .Sq \ev
3157 .Pq vertical position ,
3158 .Sq \em
3159 .Pq text colour ,
3160 .Sq \eM
3161 .Pq text filling colour ,
3162 .Sq \ez
3163 .Pq zero-length character ,
3164 .Sq \ew
3165 .Pq string length ,
3166 .Sq \ek
3167 .Pq horizontal position marker ,
3168 .Sq \eo
3169 .Pq text overstrike ,
3170 and
3171 .Sq \es
3172 .Pq text size
3173 escape sequences are all discarded in mandoc.
3174 .It
3175 The
3176 .Sq \ef
3177 scaling unit is accepted by mandoc, but rendered as the default unit.
3178 .It
3179 In quoted literals, groff allows pairwise double-quotes to produce a
3180 standalone double-quote in formatted output.
3181 This is not supported by mandoc.
3182 .El
3183 .Sh SEE ALSO
3184 .Xr man 1 ,
3185 .Xr mandoc 1 ,
3186 .Xr eqn 5 ,
3187 .Xr man 5 ,
3188 .Xr mandoc_char 5 ,
3189 .Xr roff 5 ,
3190 .Xr tbl 5
3191 .Sh HISTORY
3192 The
3193 .Nm
3194 language first appeared as a troff macro package in
3195 .Bx 4.4 .
3196 It was later significantly updated by Werner Lemberg and Ruslan Ermilov
3197 in groff-1.17.
3198 The standalone implementation that is part of the
3199 .Xr mandoc 1
3200 utility written by Kristaps Dzonsons appeared in
3201 .Ox 4.6 .
3202 .Sh AUTHORS
3203 The
3204 .Nm
3205 reference was written by
3206 .An Kristaps Dzonsons ,

3207 .Mt kristaps@bsd.lv .

new/usr/src/pkg/manifests/system-library.man3c.inc

1

```
*****
74018 Sun Jul 27 18:01:37 2014
new/usr/src/pkg/manifests/system-library.man3c.inc
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wcsasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
*****
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17 #
18 #
19 file path=usr/share/man/man3c/_fbufsize.3c
20 file path=usr/share/man/man3c/_longjmp.3c
21 file path=usr/share/man/man3c/_stack_grow.3c
22 file path=usr/share/man/man3c/a64l.3c
23 file path=usr/share/man/man3c/abort.3c
24 file path=usr/share/man/man3c/abs.3c
25 file path=usr/share/man/man3c/addsev.3c
26 file path=usr/share/man/man3c/addseverity.3c
27 file path=usr/share/man/man3c/aio_cancel.3c
28 file path=usr/share/man/man3c/aio_error.3c
29 file path=usr/share/man/man3c/aio_fsync.3c
30 file path=usr/share/man/man3c/aio_read.3c
31 file path=usr/share/man/man3c/aio_return.3c
32 file path=usr/share/man/man3c/aio_suspend.3c
33 file path=usr/share/man/man3c/aio_waitn.3c
34 file path=usr/share/man/man3c/aio_write.3c
35 file path=usr/share/man/man3c/aiocancel.3c
36 file path=usr/share/man/man3c/aio_read.3c
37 file path=usr/share/man/man3c/aio_wait.3c
38 file path=usr/share/man/man3c/assert.3c
39 file path=usr/share/man/man3c/atexit.3c
40 file path=usr/share/man/man3c/atomic_add.3c
41 file path=usr/share/man/man3c/atomic_and.3c
42 file path=usr/share/man/man3c/atomic_bits.3c
43 file path=usr/share/man/man3c/atomic_cas.3c
44 file path=usr/share/man/man3c/atomic_dec.3c
45 file path=usr/share/man/man3c/atomic_inc.3c
46 file path=usr/share/man/man3c/atomic_ops.3c
47 file path=usr/share/man/man3c/atomic_or.3c
48 file path=usr/share/man/man3c/atomic_swap.3c
49 file path=usr/share/man/man3c/attropen.3c
50 file path=usr/share/man/man3c/basename.3c
51 file path=usr/share/man/man3c/bsd_signal.3c
52 file path=usr/share/man/man3c/bsearch.3c
53 file path=usr/share/man/man3c/bstring.3c
54 file path=usr/share/man/man3c/btowc.3c
55 file path=usr/share/man/man3c/catgets.3c
56 file path=usr/share/man/man3c/catopen.3c
57 file path=usr/share/man/man3c/cfgetispeed.3c
58 file path=usr/share/man/man3c/cfsetispeed.3c
59 file path=usr/share/man/man3c/clock.3c
```

new/usr/src/pkg/manifests/system-library.man3c.inc

2

```
60 file path=usr/share/man/man3c/clock_nanosleep.3c
61 file path=usr/share/man/man3c/clock_settime.3c
62 file path=usr/share/man/man3c/closedir.3c
63 file path=usr/share/man/man3c/closefrom.3c
64 file path=usr/share/man/man3c/cond_init.3c
65 file path=usr/share/man/man3c/confstr.3c
66 file path=usr/share/man/man3c/crypt.3c
67 file path=usr/share/man/man3c/crypt_genhash_impl.3c
68 file path=usr/share/man/man3c/crypt_gensalt.3c
69 file path=usr/share/man/man3c/crypt_gensalt_impl.3c
70 file path=usr/share/man/man3c/cset.3c
71 file path=usr/share/man/man3c/ctermid.3c
72 file path=usr/share/man/man3c/ctime.3c
73 file path=usr/share/man/man3c/ctype.3c
74 file path=usr/share/man/man3c/cuserid.3c
75 file path=usr/share/man/man3c/daemon.3c
76 file path=usr/share/man/man3c/decimal_to_floating.3c
77 file path=usr/share/man/man3c/difftime.3c
78 file path=usr/share/man/man3c/directio.3c
79 file path=usr/share/man/man3c/dirdfd.3c
80 file path=usr/share/man/man3c/dirname.3c
81 file path=usr/share/man/man3c/div.3c
82 file path=usr/share/man/man3c/dladdr.3c
83 file path=usr/share/man/man3c/dlclose.3c
84 file path=usr/share/man/man3c/dldump.3c
85 file path=usr/share/man/man3c/dlerror.3c
86 file path=usr/share/man/man3c/dlinfo.3c
87 file path=usr/share/man/man3c/dlopen.3c
88 file path=usr/share/man/man3c/dlsym.3c
89 file path=usr/share/man/man3c/door_bind.3c
90 file path=usr/share/man/man3c/door_call.3c
91 file path=usr/share/man/man3c/door_create.3c
92 file path=usr/share/man/man3c/door_cred.3c
93 file path=usr/share/man/man3c/door_getparam.3c
94 file path=usr/share/man/man3c/door_info.3c
95 file path=usr/share/man/man3c/door_return.3c
96 file path=usr/share/man/man3c/door_revoke.3c
97 file path=usr/share/man/man3c/door_server_create.3c
98 file path=usr/share/man/man3c/door_ucred.3c
99 file path=usr/share/man/man3c/drand48.3c
100 file path=usr/share/man/man3c/dup2.3c
101 file path=usr/share/man/man3c/econvert.3c
102 file path=usr/share/man/man3c/ecvt.3c
103 file path=usr/share/man/man3c/enable_extended_FILE_stdio.3c
104 file path=usr/share/man/man3c/encrypt.3c
105 file path=usr/share/man/man3c/end.3c
106 file path=usr/share/man/man3c/err.3c
107 file path=usr/share/man/man3c/euclen.3c
108 file path=usr/share/man/man3c/exit.3c
109 file path=usr/share/man/man3c/fattach.3c
110 file path=usr/share/man/man3c/fclose.3c
111 file path=usr/share/man/man3c/fdatasync.3c
112 file path=usr/share/man/man3c/fdetach.3c
113 file path=usr/share/man/man3c/fdopen.3c
114 file path=usr/share/man/man3c/ferror.3c
115 file path=usr/share/man/man3c/fflush.3c
116 file path=usr/share/man/man3c/ffs.3c
117 file path=usr/share/man/man3c/fgetattr.3c
118 file path=usr/share/man/man3c/fgetc.3c
119 file path=usr/share/man/man3c/fgetpos.3c
120 file path=usr/share/man/man3c/fgetwc.3c
121 file path=usr/share/man/man3c/floating_to_decimal.3c
122 file path=usr/share/man/man3c/flockfile.3c
123 file path=usr/share/man/man3c/fmtmsg.3c
124 file path=usr/share/man/man3c/fnmatch.3c
125 file path=usr/share/man/man3c/fopen.3c
```

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126 file path=usr/share/man/man3c/fpgetround.3c
127 file path=usr/share/man/man3c/fputc.3c
128 file path=usr/share/man/man3c/fputwc.3c
129 file path=usr/share/man/man3c/fputws.3c
130 file path=usr/share/man/man3c/fread.3c
131 file path=usr/share/man/man3c/freopen.3c
132 file path=usr/share/man/man3c/fseek.3c
133 file path=usr/share/man/man3c/fsetpos.3c
134 file path=usr/share/man/man3c/fsync.3c
135 file path=usr/share/man/man3c/ftell.3c
136 file path=usr/share/man/man3c/ftime.3c
137 file path=usr/share/man/man3c/ftok.3c
138 file path=usr/share/man/man3c/ftw.3c
139 file path=usr/share/man/man3c/fwide.3c
140 file path=usr/share/man/man3c/fwprintf.3c
141 file path=usr/share/man/man3c/fwrite.3c
142 file path=usr/share/man/man3c/fwscanf.3c
143 file path=usr/share/man/man3c/getcpuid.3c
144 file path=usr/share/man/man3c/getcwd.3c
145 file path=usr/share/man/man3c/getdate.3c
146 file path=usr/share/man/man3c/getdtablesize.3c
147 file path=usr/share/man/man3c/getenv.3c
148 file path=usr/share/man/man3c/getexecname.3c
149 file path=usr/share/man/man3c/getgrnam.3c
150 file path=usr/share/man/man3c/gethostid.3c
151 file path=usr/share/man/man3c/gethostname.3c
152 file path=usr/share/man/man3c/gethrtime.3c
153 file path=usr/share/man/man3c/getline.3c
154 file path=usr/share/man/man3c/getloadavg.3c
155 file path=usr/share/man/man3c/getlogin.3c
156 file path=usr/share/man/man3c/getmntent.3c
157 file path=usr/share/man/man3c/getnetgrent.3c
158 file path=usr/share/man/man3c/getopt.3c
159 file path=usr/share/man/man3c/getpagesize.3c
160 file path=usr/share/man/man3c/getpagesizes.3c
161 file path=usr/share/man/man3c/getpass.3c
162 file path=usr/share/man/man3c/getpeerucred.3c
163 file path=usr/share/man/man3c/getpriority.3c
164 file path=usr/share/man/man3c/getpw.3c
165 file path=usr/share/man/man3c/getpwnam.3c
166 file path=usr/share/man/man3c/getrusage.3c
167 file path=usr/share/man/man3c/gets.3c
168 file path=usr/share/man/man3c/getspnam.3c
169 file path=usr/share/man/man3c/getsubopt.3c
170 file path=usr/share/man/man3c/gettext.3c
171 file path=usr/share/man/man3c/gettimeofday.3c
172 file path=usr/share/man/man3c/gettxt.3c
173 file path=usr/share/man/man3c/getusershell.3c
174 file path=usr/share/man/man3c/getutent.3c
175 file path=usr/share/man/man3c/getutxent.3c
176 file path=usr/share/man/man3c/getvfsent.3c
177 file path=usr/share/man/man3c/getwc.3c
178 file path=usr/share/man/man3c/getwchar.3c
179 file path=usr/share/man/man3c/getwd.3c
180 file path=usr/share/man/man3c/getwidth.3c
181 file path=usr/share/man/man3c/getws.3c
182 file path=usr/share/man/man3c/getzoneid.3c
183 file path=usr/share/man/man3c/glob.3c
184 file path=usr/share/man/man3c/grantpt.3c
185 file path=usr/share/man/man3c/hsearch.3c
186 file path=usr/share/man/man3c/iconv.3c
187 file path=usr/share/man/man3c/iconv_close.3c
188 file path=usr/share/man/man3c/iconv_open.3c
189 file path=usr/share/man/man3c/imaxabs.3c
190 file path=usr/share/man/man3c/imaxdiv.3c
191 file path=usr/share/man/man3c/index.3c
```

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192 file path=usr/share/man/man3c/initgroups.3c
193 file path=usr/share/man/man3c/insque.3c
194 file path=usr/share/man/man3c/is_system_labeled.3c
195 file path=usr/share/man/man3c/isaexec.3c
196 file path=usr/share/man/man3c/isastream.3c
197 file path=usr/share/man/man3c/isatty.3c
198 file path=usr/share/man/man3c/isnand.3c
199 file path=usr/share/man/man3c/iswalph.3c
200 file path=usr/share/man/man3c/iswctype.3c
201 file path=usr/share/man/man3c/killpg.3c
202 file path=usr/share/man/man3c/lckpddf.3c
203 file path=usr/share/man/man3c/lfmt.3c
204 file path=usr/share/man/man3c/llo_listio.3c
205 file path=usr/share/man/man3c/localeconv.3c
206 file path=usr/share/man/man3c/lockf.3c
207 file path=usr/share/man/man3c/lsearch.3c
208 file path=usr/share/man/man3c/madvise.3c
209 file path=usr/share/man/man3c/makecontext.3c
210 file path=usr/share/man/man3c/makedev.3c
211 file path=usr/share/man/man3c/malloc.3c
212 file path=usr/share/man/man3c/mblen.3c
213 file path=usr/share/man/man3c/mbrlen.3c
214 file path=usr/share/man/man3c/mbrtowc.3c
215 file path=usr/share/man/man3c/mbsinit.3c
216 file path=usr/share/man/man3c/mbsrtowcs.3c
217 file path=usr/share/man/man3c/mbtowc.3c
218 file path=usr/share/man/man3c/membar_ops.3c
219 file path=usr/share/man/man3c/memory.3c
220 file path=usr/share/man/man3c/mkfifo.3c
221 file path=usr/share/man/man3c/mkstemp.3c
222 file path=usr/share/man/man3c/mktemp.3c
223 file path=usr/share/man/man3c/mktime.3c
224 file path=usr/share/man/man3c/mlock.3c
225 file path=usr/share/man/man3c/mlockall.3c
226 file path=usr/share/man/man3c/monitor.3c
227 file path=usr/share/man/man3c/mq_close.3c
228 file path=usr/share/man/man3c/mq_getattr.3c
229 file path=usr/share/man/man3c/mq_notify.3c
230 file path=usr/share/man/man3c/mq_open.3c
231 file path=usr/share/man/man3c/mq_receive.3c
232 file path=usr/share/man/man3c/mq_send.3c
233 file path=usr/share/man/man3c/mq_setattr.3c
234 file path=usr/share/man/man3c/mq_unlink.3c
235 file path=usr/share/man/man3c/msync.3c
236 file path=usr/share/man/man3c/mutex_init.3c
237 file path=usr/share/man/man3c/nanosleep.3c
238 file path=usr/share/man/man3c/ndbm.3c
239 file path=usr/share/man/man3c/newlocale.3c
240 file path=usr/share/man/man3c/nl_langinfo.3c
241 file path=usr/share/man/man3c/offsetof.3c
242 file path=usr/share/man/man3c/opendir.3c
243 file path=usr/share/man/man3c/perror.3c
244 file path=usr/share/man/man3c/pfmt.3c
245 file path=usr/share/man/man3c/plock.3c
246 file path=usr/share/man/man3c/popen.3c
247 file path=usr/share/man/man3c/port_alert.3c
248 file path=usr/share/man/man3c/port_associate.3c
249 file path=usr/share/man/man3c/port_create.3c
250 file path=usr/share/man/man3c/port_get.3c
251 file path=usr/share/man/man3c/port_send.3c
252 file path=usr/share/man/man3c/posix_fadvise.3c
253 file path=usr/share/man/man3c/posix_fallocate.3c
254 file path=usr/share/man/man3c/posix_madvise.3c
255 file path=usr/share/man/man3c/posix_memalign.3c
256 file path=usr/share/man/man3c/posix_openpt.3c
257 file path=usr/share/man/man3c/posix_spawn.3c
```

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258 file path=usr/share/man/man3c/posix_spawn_file_actions_addclose.3c
259 file path=usr/share/man/man3c/posix_spawn_file_actions_addclosefrom_np.3c
260 file path=usr/share/man/man3c/posix_spawn_file_actions_adddup2.3c
261 file path=usr/share/man/man3c/posix_spawn_file_actions_destroy.3c
262 file path=usr/share/man/man3c/posix_spawn_pipe_np.3c
263 file path=usr/share/man/man3c/posix_spawnattr_destroy.3c
264 file path=usr/share/man/man3c/posix_spawnattr_getflags.3c
265 file path=usr/share/man/man3c/posix_spawnattr_getpgroup.3c
266 file path=usr/share/man/man3c/posix_spawnattr_getschedparam.3c
267 file path=usr/share/man/man3c/posix_spawnattr_getschedpolicy.3c
268 file path=usr/share/man/man3c/posix_spawnattr_getsigdefault.3c
269 file path=usr/share/man/man3c/posix_spawnattr_getsigignore_np.3c
270 file path=usr/share/man/man3c/posix_spawnattr_getsigmask.3c
271 file path=usr/share/man/man3c/printf.3c
272 file path=usr/share/man/man3c/priv_addset.3c
273 file path=usr/share/man/man3c/priv_set.3c
274 file path=usr/share/man/man3c/priv_str_to_set.3c
275 file path=usr/share/man/man3c/pset_getloadavg.3c
276 file path=usr/share/man/man3c/psignal.3c
277 file path=usr/share/man/man3c/pthread_atfork.3c
278 file path=usr/share/man/man3c/pthread_attr_getdetachstate.3c
279 file path=usr/share/man/man3c/pthread_attr_getguardsize.3c
280 file path=usr/share/man/man3c/pthread_attr_getinheritsched.3c
281 file path=usr/share/man/man3c/pthread_attr_getschedparam.3c
282 file path=usr/share/man/man3c/pthread_attr_getschedpolicy.3c
283 file path=usr/share/man/man3c/pthread_attr_getscope.3c
284 file path=usr/share/man/man3c/pthread_attr_getstack.3c
285 file path=usr/share/man/man3c/pthread_attr_getstackaddr.3c
286 file path=usr/share/man/man3c/pthread_attr_getstacksize.3c
287 file path=usr/share/man/man3c/pthread_attr_init.3c
288 file path=usr/share/man/man3c/pthread_barrier_destroy.3c
289 file path=usr/share/man/man3c/pthread_barrier_wait.3c
290 file path=usr/share/man/man3c/pthread_barrierattr_destroy.3c
291 file path=usr/share/man/man3c/pthread_barrierattr_getpshared.3c
292 file path=usr/share/man/man3c/pthread_cancel.3c
293 file path=usr/share/man/man3c/pthread_cleanup_pop.3c
294 file path=usr/share/man/man3c/pthread_cleanup_push.3c
295 file path=usr/share/man/man3c/pthread_cond_init.3c
296 file path=usr/share/man/man3c/pthread_cond_signal.3c
297 file path=usr/share/man/man3c/pthread_cond_wait.3c
298 file path=usr/share/man/man3c/pthread_condattr_getclock.3c
299 file path=usr/share/man/man3c/pthread_condattr_getpshared.3c
300 file path=usr/share/man/man3c/pthread_condattr_init.3c
301 file path=usr/share/man/man3c/pthread_create.3c
302 file path=usr/share/man/man3c/pthread_detach.3c
303 file path=usr/share/man/man3c/pthread_equal.3c
304 file path=usr/share/man/man3c/pthread_exit.3c
305 file path=usr/share/man/man3c/pthread_getconcurrency.3c
306 file path=usr/share/man/man3c/pthread_getschedparam.3c
307 file path=usr/share/man/man3c/pthread_getspecific.3c
308 file path=usr/share/man/man3c/pthread_join.3c
309 file path=usr/share/man/man3c/pthread_key_create.3c
310 file path=usr/share/man/man3c/pthread_key_delete.3c
311 file path=usr/share/man/man3c/pthread_kill.3c
312 file path=usr/share/man/man3c/pthread_mutex_getprioceiling.3c
313 file path=usr/share/man/man3c/pthread_mutex_init.3c
314 file path=usr/share/man/man3c/pthread_mutex_lock.3c
315 file path=usr/share/man/man3c/pthread_mutex_timedlock.3c
316 file path=usr/share/man/man3c/pthread_mutexattr_getprioceiling.3c
317 file path=usr/share/man/man3c/pthread_mutexattr_getprotocol.3c
318 file path=usr/share/man/man3c/pthread_mutexattr_getpshared.3c
319 file path=usr/share/man/man3c/pthread_mutexattr_gettype.3c
320 file path=usr/share/man/man3c/pthread_mutexattr_init.3c
321 file path=usr/share/man/man3c/pthread_once.3c
322 file path=usr/share/man/man3c/pthread_rwlock_init.3c
323 file path=usr/share/man/man3c/pthread_rwlock_rdlock.3c
```

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324 file path=usr/share/man/man3c/pthread_rwlock_timedrdlock.3c
325 file path=usr/share/man/man3c/pthread_rwlock_timedwrlock.3c
326 file path=usr/share/man/man3c/pthread_rwlock_unlock.3c
327 file path=usr/share/man/man3c/pthread_rwlock_wrlock.3c
328 file path=usr/share/man/man3c/pthread_rwlockattr_getpshared.3c
329 file path=usr/share/man/man3c/pthread_rwlockattr_init.3c
330 file path=usr/share/man/man3c/pthread_self.3c
331 file path=usr/share/man/man3c/pthread_setcancelstate.3c
332 file path=usr/share/man/man3c/pthread_setcanceltype.3c
333 file path=usr/share/man/man3c/pthread_setschedprio.3c
334 file path=usr/share/man/man3c/pthread_sigmask.3c
335 file path=usr/share/man/man3c/pthread_spin_destroy.3c
336 file path=usr/share/man/man3c/pthread_spin_lock.3c
337 file path=usr/share/man/man3c/pthread_spin_unlock.3c
338 file path=usr/share/man/man3c/pthread_testcancel.3c
339 file path=usr/share/man/man3c/ptrace.3c
340 file path=usr/share/man/man3c/ptsname.3c
341 file path=usr/share/man/man3c/putenv.3c
342 file path=usr/share/man/man3c/putpwent.3c
343 file path=usr/share/man/man3c/puts.3c
344 file path=usr/share/man/man3c/putspent.3c
345 file path=usr/share/man/man3c/putws.3c
346 file path=usr/share/man/man3c/qsort.3c
347 file path=usr/share/man/man3c/raise.3c
348 file path=usr/share/man/man3c/rand.3c
349 file path=usr/share/man/man3c/random.3c
350 file path=usr/share/man/man3c/rctl_walk.3c
351 file path=usr/share/man/man3c/rctlblk_set_value.3c
352 file path=usr/share/man/man3c/re_comp.3c
353 file path=usr/share/man/man3c/readdir.3c
354 file path=usr/share/man/man3c/realpath.3c
355 file path=usr/share/man/man3c/reboot.3c
356 file path=usr/share/man/man3c/regcomp.3c
357 file path=usr/share/man/man3c/regcomp.3c
358 file path=usr/share/man/man3c/remove.3c
359 file path=usr/share/man/man3c/rewind.3c
360 file path=usr/share/man/man3c/rewinddir.3c
361 file path=usr/share/man/man3c/rwlock.3c
362 file path=usr/share/man/man3c/scandir.3c
363 file path=usr/share/man/man3c/scanf.3c
364 file path=usr/share/man/man3c/sched_get_priority_max.3c
365 file path=usr/share/man/man3c/sched_getparam.3c
366 file path=usr/share/man/man3c/sched_getscheduler.3c
367 file path=usr/share/man/man3c/sched_rr_get_interval.3c
368 file path=usr/share/man/man3c/sched_setparam.3c
369 file path=usr/share/man/man3c/sched_setscheduler.3c
370 file path=usr/share/man/man3c/sched_yield.3c
371 file path=usr/share/man/man3c/schedctl_init.3c
372 file path=usr/share/man/man3c/seekdir.3c
373 file path=usr/share/man/man3c/select.3c
374 file path=usr/share/man/man3c/sem_close.3c
375 file path=usr/share/man/man3c/sem_destroy.3c
376 file path=usr/share/man/man3c/sem_getvalue.3c
377 file path=usr/share/man/man3c/sem_init.3c
378 file path=usr/share/man/man3c/sem_open.3c
379 file path=usr/share/man/man3c/sem_post.3c
380 file path=usr/share/man/man3c/sem_timedwait.3c
381 file path=usr/share/man/man3c/sem_unlink.3c
382 file path=usr/share/man/man3c/sem_wait.3c
383 file path=usr/share/man/man3c/semaphore.3c
384 file path=usr/share/man/man3c/setbuf.3c
385 file path=usr/share/man/man3c/setbuffer.3c
386 file path=usr/share/man/man3c/setcat.3c
387 file path=usr/share/man/man3c/setenv.3c
388 file path=usr/share/man/man3c/setjmp.3c
389 file path=usr/share/man/man3c/setkey.3c
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390 file path=usr/share/man/man3c/setlabel.3c
391 file path=usr/share/man/man3c/setlocale.3c
392 file path=usr/share/man/man3c/shm_open.3c
393 file path=usr/share/man/man3c/shm_unlink.3c
394 file path=usr/share/man/man3c/sigfpe.3c
395 file path=usr/share/man/man3c/siginterrupt.3c
396 file path=usr/share/man/man3c/signal.3c
397 file path=usr/share/man/man3c/sigqueue.3c
398 file path=usr/share/man/man3c/sigsetops.3c
399 file path=usr/share/man/man3c/sigstack.3c
400 file path=usr/share/man/man3c/sigwaitinfo.3c
401 file path=usr/share/man/man3c/sleep.3c
402 file path=usr/share/man/man3c/ssignal.3c
403 file path=usr/share/man/man3c/stack_getbounds.3c
404 file path=usr/share/man/man3c/stack_inbounds.3c
405 file path=usr/share/man/man3c/stack_setbounds.3c
406 file path=usr/share/man/man3c/stack_violation.3c
407 file path=usr/share/man/man3c/stdio.3c
408 file path=usr/share/man/man3c/str2sig.3c
409 file path=usr/share/man/man3c/strcoll.3c
410 file path=usr/share/man/man3c/strerror.3c
411 file path=usr/share/man/man3c/strfmon.3c
412 file path=usr/share/man/man3c/strftime.3c
413 file path=usr/share/man/man3c/string.3c
414 file path=usr/share/man/man3c/string_to_decimal.3c
415 file path=usr/share/man/man3c/strptime.3c
416 file path=usr/share/man/man3c/strsignal.3c
417 file path=usr/share/man/man3c/strtod.3c
418 file path=usr/share/man/man3c/strtoimax.3c
419 file path=usr/share/man/man3c/strtol.3c
420 file path=usr/share/man/man3c/strtoul.3c
421 file path=usr/share/man/man3c/strtows.3c
422 file path=usr/share/man/man3c/strxfrm.3c
423 file path=usr/share/man/man3c/swab.3c
424 file path=usr/share/man/man3c/sync_instruction_memory.3c
425 file path=usr/share/man/man3c/sysconf.3c
426 file path=usr/share/man/man3c/syslog.3c
427 file path=usr/share/man/man3c/system.3c
428 file path=usr/share/man/man3c/tcdrain.3c
429 file path=usr/share/man/man3c/tcflow.3c
430 file path=usr/share/man/man3c/tcflush.3c
431 file path=usr/share/man/man3c/tcgetattr.3c
432 file path=usr/share/man/man3c/tcgetpgrp.3c
433 file path=usr/share/man/man3c/tcgetsid.3c
434 file path=usr/share/man/man3c/tcsendbreak.3c
435 file path=usr/share/man/man3c/tcsetattr.3c
436 file path=usr/share/man/man3c/tcsetpgrp.3c
437 file path=usr/share/man/man3c/tell.3c
438 file path=usr/share/man/man3c/telldir.3c
439 file path=usr/share/man/man3c/termios.3c
440 file path=usr/share/man/man3c/thr_create.3c
441 file path=usr/share/man/man3c/thr_exit.3c
442 file path=usr/share/man/man3c/thr_getconcurrency.3c
443 file path=usr/share/man/man3c/thr_getprio.3c
444 file path=usr/share/man/man3c/thr_join.3c
445 file path=usr/share/man/man3c/thr_keycreate.3c
446 file path=usr/share/man/man3c/thr_kill.3c
447 file path=usr/share/man/man3c/thr_main.3c
448 file path=usr/share/man/man3c/thr_min_stack.3c
449 file path=usr/share/man/man3c/thr_self.3c
450 file path=usr/share/man/man3c/thr_sigsetmask.3c
451 file path=usr/share/man/man3c/thr_stksegment.3c
452 file path=usr/share/man/man3c/thr_suspend.3c
453 file path=usr/share/man/man3c/thr_yield.3c
454 file path=usr/share/man/man3c/timer_create.3c
455 file path=usr/share/man/man3c/timer_delete.3c
```

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456 file path=usr/share/man/man3c/timer_settime.3c
457 file path=usr/share/man/man3c/timeradd.3c
458 file path=usr/share/man/man3c/tmpfile.3c
459 file path=usr/share/man/man3c/tmpnam.3c
460 file path=usr/share/man/man3c/toascii.3c
461 file path=usr/share/man/man3c/tolower.3c
462 file path=usr/share/man/man3c/toupper.3c
463 file path=usr/share/man/man3c/towlower.3c
464 file path=usr/share/man/man3c/towupper.3c
465 file path=usr/share/man/man3c/truncate.3c
466 file path=usr/share/man/man3c/tsearch.3c
467 file path=usr/share/man/man3c/ttynname.3c
468 file path=usr/share/man/man3c/ttyslot.3c
469 file path=usr/share/man/man3c/u8_strcmp.3c
470 file path=usr/share/man/man3c/u8_textprep_str.3c
471 file path=usr/share/man/man3c/u8_validate.3c
472 file path=usr/share/man/man3c/ualarm.3c
473 file path=usr/share/man/man3c/uconv_ul6tou32.3c
474 file path=usr/share/man/man3c/ucrd_get.3c
475 file path=usr/share/man/man3c/ungetc.3c
476 file path=usr/share/man/man3c/ungetwc.3c
477 file path=usr/share/man/man3c/unlockpt.3c
478 file path=usr/share/man/man3c/unsetenv.3c
479 file path=usr/share/man/man3c/uselocale.3c
480 file path=usr/share/man/man3c/usleep.3c
481 file path=usr/share/man/man3c/vfwprintf.3c
482 file path=usr/share/man/man3c/vlfmt.3c
483 file path=usr/share/man/man3c/vpfmt.3c
484 file path=usr/share/man/man3c/vprintf.3c
485 file path=usr/share/man/man3c/vsyslog.3c
486 file path=usr/share/man/man3c/wait.3c
487 file path=usr/share/man/man3c/wait3.3c
488 file path=usr/share/man/man3c/waitpid.3c
489 file path=usr/share/man/man3c/walkcontext.3c
490 file path=usr/share/man/man3c/wrtomb.3c
491 file path=usr/share/man/man3c/wscasecmp.3c
492 file path=usr/share/man/man3c/wscoll.3c
493 file path=usr/share/man/man3c/wcsdup.3c
494 file path=usr/share/man/man3c/wcsftime.3c
495 file path=usr/share/man/man3c/wcslen.3c
496 file path=usr/share/man/man3c/wcsrtombs.3c
497 file path=usr/share/man/man3c/wcsstr.3c
498 file path=usr/share/man/man3c/wcstod.3c
499 file path=usr/share/man/man3c/wcstoimax.3c
500 file path=usr/share/man/man3c/wcstol.3c
501 file path=usr/share/man/man3c/wcstoul.3c
502 file path=usr/share/man/man3c/wcstring.3c
503 file path=usr/share/man/man3c/wcswidth.3c
504 file path=usr/share/man/man3c/wcsxfrm.3c
505 file path=usr/share/man/man3c/wctob.3c
506 file path=usr/share/man/man3c/wctomb.3c
507 file path=usr/share/man/man3c/wctrans.3c
508 file path=usr/share/man/man3c/wctype.3c
509 file path=usr/share/man/man3c/wcwidth.3c
510 file path=usr/share/man/man3c/wmemchr.3c
511 file path=usr/share/man/man3c/wmemcmp.3c
512 file path=usr/share/man/man3c/wmemcpy.3c
513 file path=usr/share/man/man3c/wmemmove.3c
514 file path=usr/share/man/man3c/wmemset.3c
515 file path=usr/share/man/man3c/worexp.3c
516 file path=usr/share/man/man3c/wsprintf.3c
517 file path=usr/share/man/man3c/wsscanf.3c
518 file path=usr/share/man/man3c/wstring.3c
519 link path=usr/share/man/man3c/FD_CLR.3c target=select.3c
520 link path=usr/share/man/man3c/FD_ISSET.3c target=select.3c
521 link path=usr/share/man/man3c/FD_SET.3c target=select.3c
```

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522 link path=usr/share/man/man3c/FD_ZERO.3c target=select.3c
523 link path=usr/share/man/man3c/___flbf.3c target=___fbufsize.3c
524 link path=usr/share/man/man3c/___fpending.3c target=___fbufsize.3c
525 link path=usr/share/man/man3c/___fpurge.3c target=___fbufsize.3c
526 link path=usr/share/man/man3c/___freadable.3c target=___fbufsize.3c
527 link path=usr/share/man/man3c/___freading.3c target=___fbufsize.3c
528 link path=usr/share/man/man3c/___fsetlocking.3c target=___fbufsize.3c
529 link path=usr/share/man/man3c/___fwritable.3c target=___fbufsize.3c
530 link path=usr/share/man/man3c/___fwriting.3c target=___fbufsize.3c
531 link path=usr/share/man/man3c/_edata.3c target=end.3c
532 link path=usr/share/man/man3c/_end.3c target=end.3c
533 link path=usr/share/man/man3c/_etext.3c target=end.3c
534 link path=usr/share/man/man3c/_exithandle.3c target=exit.3c
535 link path=usr/share/man/man3c/_flushlbf.3c target=___fbufsize.3c
536 link path=usr/share/man/man3c/_setjmp.3c target=___longjmp.3c
537 link path=usr/share/man/man3c/addrtosymstr.3c target=walkcontext.3c
538 link path=usr/share/man/man3c/aiowrite.3c target=aioread.3c
539 link path=usr/share/man/man3c/alloca.3c target=malloc.3c
540 link path=usr/share/man/man3c/alphasort.3c target=scandir.3c
541 link path=usr/share/man/man3c/asctime.3c target=strftime.3c
542 link path=usr/share/man/man3c/asctime.3c target=ctime.3c
543 link path=usr/share/man/man3c/asctime_r.3c target=ctime.3c
544 link path=usr/share/man/man3c/asprintf.3c target=printf.3c
545 link path=usr/share/man/man3c/atof.3c target=strtod.3c
546 link path=usr/share/man/man3c/atol.3c target=strtol.3c
547 link path=usr/share/man/man3c/atol.3c target=strtol.3c
548 link path=usr/share/man/man3c/atoll.3c target=strtol.3c
549 link path=usr/share/man/man3c/atomic_add_16.3c target=atomic_add.3c
550 link path=usr/share/man/man3c/atomic_add_16_nv.3c target=atomic_add.3c
551 link path=usr/share/man/man3c/atomic_add_32.3c target=atomic_add.3c
552 link path=usr/share/man/man3c/atomic_add_32_nv.3c target=atomic_add.3c
553 link path=usr/share/man/man3c/atomic_add_64.3c target=atomic_add.3c
554 link path=usr/share/man/man3c/atomic_add_64_nv.3c target=atomic_add.3c
555 link path=usr/share/man/man3c/atomic_add_8.3c target=atomic_add.3c
556 link path=usr/share/man/man3c/atomic_add_8_nv.3c target=atomic_add.3c
557 link path=usr/share/man/man3c/atomic_add_char.3c target=atomic_add.3c
558 link path=usr/share/man/man3c/atomic_add_char_nv.3c target=atomic_add.3c
559 link path=usr/share/man/man3c/atomic_add_int.3c target=atomic_add.3c
560 link path=usr/share/man/man3c/atomic_add_int_nv.3c target=atomic_add.3c
561 link path=usr/share/man/man3c/atomic_add_long.3c target=atomic_add.3c
562 link path=usr/share/man/man3c/atomic_add_long_nv.3c target=atomic_add.3c
563 link path=usr/share/man/man3c/atomic_add_ptr.3c target=atomic_add.3c
564 link path=usr/share/man/man3c/atomic_add_ptr_nv.3c target=atomic_add.3c
565 link path=usr/share/man/man3c/atomic_add_short.3c target=atomic_add.3c
566 link path=usr/share/man/man3c/atomic_add_short_nv.3c target=atomic_add.3c
567 link path=usr/share/man/man3c/atomic_and_16.3c target=atomic_and.3c
568 link path=usr/share/man/man3c/atomic_and_16_nv.3c target=atomic_and.3c
569 link path=usr/share/man/man3c/atomic_and_32.3c target=atomic_and.3c
570 link path=usr/share/man/man3c/atomic_and_32_nv.3c target=atomic_and.3c
571 link path=usr/share/man/man3c/atomic_and_64.3c target=atomic_and.3c
572 link path=usr/share/man/man3c/atomic_and_64_nv.3c target=atomic_and.3c
573 link path=usr/share/man/man3c/atomic_and_8.3c target=atomic_and.3c
574 link path=usr/share/man/man3c/atomic_and_8_nv.3c target=atomic_and.3c
575 link path=usr/share/man/man3c/atomic_and_uchar.3c target=atomic_and.3c
576 link path=usr/share/man/man3c/atomic_and_uchar_nv.3c target=atomic_and.3c
577 link path=usr/share/man/man3c/atomic_and_uint.3c target=atomic_and.3c
578 link path=usr/share/man/man3c/atomic_and_uint_nv.3c target=atomic_and.3c
579 link path=usr/share/man/man3c/atomic_and_ulong.3c target=atomic_and.3c
580 link path=usr/share/man/man3c/atomic_and_ulong_nv.3c target=atomic_and.3c
581 link path=usr/share/man/man3c/atomic_and_ushort.3c target=atomic_and.3c
582 link path=usr/share/man/man3c/atomic_and_ushort_nv.3c target=atomic_and.3c
583 link path=usr/share/man/man3c/atomic_cas_16.3c target=atomic_cas.3c
584 link path=usr/share/man/man3c/atomic_cas_32.3c target=atomic_cas.3c
585 link path=usr/share/man/man3c/atomic_cas_64.3c target=atomic_cas.3c
586 link path=usr/share/man/man3c/atomic_cas_8.3c target=atomic_cas.3c
587 link path=usr/share/man/man3c/atomic_cas_ptr.3c target=atomic_cas.3c
```

```
588 link path=usr/share/man/man3c/atomic_cas_uchar.3c target=atomic_cas.3c
589 link path=usr/share/man/man3c/atomic_cas_uint.3c target=atomic_cas.3c
590 link path=usr/share/man/man3c/atomic_cas_ulong.3c target=atomic_cas.3c
591 link path=usr/share/man/man3c/atomic_cas_ushort.3c target=atomic_cas.3c
592 link path=usr/share/man/man3c/atomic_clear_long_excl.3c target=atomic_bits.3c
593 link path=usr/share/man/man3c/atomic_dec_16.3c target=atomic_dec.3c
594 link path=usr/share/man/man3c/atomic_dec_16_nv.3c target=atomic_dec.3c
595 link path=usr/share/man/man3c/atomic_dec_32.3c target=atomic_dec.3c
596 link path=usr/share/man/man3c/atomic_dec_32_nv.3c target=atomic_dec.3c
597 link path=usr/share/man/man3c/atomic_dec_64.3c target=atomic_dec.3c
598 link path=usr/share/man/man3c/atomic_dec_64_nv.3c target=atomic_dec.3c
599 link path=usr/share/man/man3c/atomic_dec_8.3c target=atomic_dec.3c
600 link path=usr/share/man/man3c/atomic_dec_8_nv.3c target=atomic_dec.3c
601 link path=usr/share/man/man3c/atomic_dec_ptr.3c target=atomic_dec.3c
602 link path=usr/share/man/man3c/atomic_dec_ptr_nv.3c target=atomic_dec.3c
603 link path=usr/share/man/man3c/atomic_dec_uchar.3c target=atomic_dec.3c
604 link path=usr/share/man/man3c/atomic_dec_uchar_nv.3c target=atomic_dec.3c
605 link path=usr/share/man/man3c/atomic_dec_uint.3c target=atomic_dec.3c
606 link path=usr/share/man/man3c/atomic_dec_uint_nv.3c target=atomic_dec.3c
607 link path=usr/share/man/man3c/atomic_dec_ulong.3c target=atomic_dec.3c
608 link path=usr/share/man/man3c/atomic_dec_ulong_nv.3c target=atomic_dec.3c
609 link path=usr/share/man/man3c/atomic_dec_ushort.3c target=atomic_dec.3c
610 link path=usr/share/man/man3c/atomic_dec_ushort_nv.3c target=atomic_dec.3c
611 link path=usr/share/man/man3c/atomic_inc_16.3c target=atomic_inc.3c
612 link path=usr/share/man/man3c/atomic_inc_16_nv.3c target=atomic_inc.3c
613 link path=usr/share/man/man3c/atomic_inc_32.3c target=atomic_inc.3c
614 link path=usr/share/man/man3c/atomic_inc_32_nv.3c target=atomic_inc.3c
615 link path=usr/share/man/man3c/atomic_inc_64.3c target=atomic_inc.3c
616 link path=usr/share/man/man3c/atomic_inc_64_nv.3c target=atomic_inc.3c
617 link path=usr/share/man/man3c/atomic_inc_8.3c target=atomic_inc.3c
618 link path=usr/share/man/man3c/atomic_inc_8_nv.3c target=atomic_inc.3c
619 link path=usr/share/man/man3c/atomic_inc_ptr.3c target=atomic_inc.3c
620 link path=usr/share/man/man3c/atomic_inc_ptr_nv.3c target=atomic_inc.3c
621 link path=usr/share/man/man3c/atomic_inc_uchar.3c target=atomic_inc.3c
622 link path=usr/share/man/man3c/atomic_inc_uchar_nv.3c target=atomic_inc.3c
623 link path=usr/share/man/man3c/atomic_inc_uint.3c target=atomic_inc.3c
624 link path=usr/share/man/man3c/atomic_inc_uint_nv.3c target=atomic_inc.3c
625 link path=usr/share/man/man3c/atomic_inc_ulong.3c target=atomic_inc.3c
626 link path=usr/share/man/man3c/atomic_inc_ulong_nv.3c target=atomic_inc.3c
627 link path=usr/share/man/man3c/atomic_inc_ushort.3c target=atomic_inc.3c
628 link path=usr/share/man/man3c/atomic_inc_ushort_nv.3c target=atomic_inc.3c
629 link path=usr/share/man/man3c/atomic_or_16.3c target=atomic_or.3c
630 link path=usr/share/man/man3c/atomic_or_16_nv.3c target=atomic_or.3c
631 link path=usr/share/man/man3c/atomic_or_32.3c target=atomic_or.3c
632 link path=usr/share/man/man3c/atomic_or_32_nv.3c target=atomic_or.3c
633 link path=usr/share/man/man3c/atomic_or_64.3c target=atomic_or.3c
634 link path=usr/share/man/man3c/atomic_or_64_nv.3c target=atomic_or.3c
635 link path=usr/share/man/man3c/atomic_or_8.3c target=atomic_or.3c
636 link path=usr/share/man/man3c/atomic_or_8_nv.3c target=atomic_or.3c
637 link path=usr/share/man/man3c/atomic_or_uchar.3c target=atomic_or.3c
638 link path=usr/share/man/man3c/atomic_or_uchar_nv.3c target=atomic_or.3c
639 link path=usr/share/man/man3c/atomic_or_uint.3c target=atomic_or.3c
640 link path=usr/share/man/man3c/atomic_or_uint_nv.3c target=atomic_or.3c
641 link path=usr/share/man/man3c/atomic_or_ulong.3c target=atomic_or.3c
642 link path=usr/share/man/man3c/atomic_or_ulong_nv.3c target=atomic_or.3c
643 link path=usr/share/man/man3c/atomic_or_ushort.3c target=atomic_or.3c
644 link path=usr/share/man/man3c/atomic_or_ushort_nv.3c target=atomic_or.3c
645 link path=usr/share/man/man3c/atomic_set_long_excl.3c target=atomic_bits.3c
646 link path=usr/share/man/man3c/atomic_swap_16.3c target=atomic_swap.3c
647 link path=usr/share/man/man3c/atomic_swap_32.3c target=atomic_swap.3c
648 link path=usr/share/man/man3c/atomic_swap_64.3c target=atomic_swap.3c
649 link path=usr/share/man/man3c/atomic_swap_8.3c target=atomic_swap.3c
650 link path=usr/share/man/man3c/atomic_swap_ptr.3c target=atomic_swap.3c
651 link path=usr/share/man/man3c/atomic_swap_uchar.3c target=atomic_swap.3c
652 link path=usr/share/man/man3c/atomic_swap_uint.3c target=atomic_swap.3c
653 link path=usr/share/man/man3c/atomic_swap_ulong.3c target=atomic_swap.3c
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654 link path=usr/share/man/man3c/atomic_swap_ushort.3c target=atomic_swap.3c
655 link path=usr/share/man/man3c/backtrace.3c target=walkcontext.3c
656 link path=usr/share/man/man3c/backtrace_symbols.3c target=walkcontext.3c
657 link path=usr/share/man/man3c/backtrace_symbols_fd.3c target=walkcontext.3c
658 link path=usr/share/man/man3c/bcmp.3c target=bstring.3c
659 link path=usr/share/man/man3c/bcopy.3c target=bstring.3c
660 link path=usr/share/man/man3c/bind_textdomain_codeset.3c target=gettext.3c
661 link path=usr/share/man/man3c/bindtextdomain.3c target=gettext.3c
662 link path=usr/share/man/man3c/btowc_l.3c target=btowc.3c
663 link path=usr/share/man/man3c/bzero.3c target=bstring.3c
664 link path=usr/share/man/man3c/calloc.3c target=malloc.3c
665 link path=usr/share/man/man3c/catclose.3c target=catopen.3c
666 link path=usr/share/man/man3c/cfgetospeed.3c target=cfgetispeed.3c
667 link path=usr/share/man/man3c/cfsetospeed.3c target=cfsetispeed.3c
668 link path=usr/share/man/man3c/cftime.3c target=strftime.3c
669 link path=usr/share/man/man3c/clearerr.3c target=error.3c
670 link path=usr/share/man/man3c/clock_getres.3c target=clock_settime.3c
671 link path=usr/share/man/man3c/clock_gettime.3c target=clock_settime.3c
672 link path=usr/share/man/man3c/closelog.3c target=syslog.3c
673 link path=usr/share/man/man3c/cond_broadcast.3c target=cond_init.3c
674 link path=usr/share/man/man3c/cond_destroy.3c target=cond_init.3c
675 link path=usr/share/man/man3c/cond_reltimedwait.3c target=cond_init.3c
676 link path=usr/share/man/man3c/cond_signal.3c target=cond_init.3c
677 link path=usr/share/man/man3c/cond_timedwait.3c target=cond_init.3c
678 link path=usr/share/man/man3c/cond_wait.3c target=cond_init.3c
679 link path=usr/share/man/man3c/csetcol.3c target=cset.3c
680 link path=usr/share/man/man3c/csetlen.3c target=cset.3c
681 link path=usr/share/man/man3c/csetno.3c target=cset.3c
682 link path=usr/share/man/man3c/ctermid_r.3c target=ctermid.3c
683 link path=usr/share/man/man3c/ctime_r.3c target=ctime.3c
684 link path=usr/share/man/man3c/dbm_clearerr.3c target=ndbm.3c
685 link path=usr/share/man/man3c/dbm_close.3c target=ndbm.3c
686 link path=usr/share/man/man3c/dbm_delete.3c target=ndbm.3c
687 link path=usr/share/man/man3c/dbm_error.3c target=ndbm.3c
688 link path=usr/share/man/man3c/dbm_fetch.3c target=ndbm.3c
689 link path=usr/share/man/man3c/dbm_firstkey.3c target=ndbm.3c
690 link path=usr/share/man/man3c/dbm_nextkey.3c target=ndbm.3c
691 link path=usr/share/man/man3c/dbm_open.3c target=ndbm.3c
692 link path=usr/share/man/man3c/dbm_store.3c target=ndbm.3c
693 link path=usr/share/man/man3c/dcgettext.3c target=gettext.3c
694 link path=usr/share/man/man3c/dcngettext.3c target=gettext.3c
695 link path=usr/share/man/man3c/decimal_to_double.3c \
696     target=decimal_to_floating.3c
697 link path=usr/share/man/man3c/decimal_to_extended.3c \
698     target=decimal_to_floating.3c
699 link path=usr/share/man/man3c/decimal_to_quadruple.3c \
700     target=decimal_to_floating.3c
701 link path=usr/share/man/man3c/decimal_to_single.3c \
702     target=decimal_to_floating.3c
703 link path=usr/share/man/man3c/dgettext.3c target=gettext.3c
704 link path=usr/share/man/man3c/dladdr1.3c target=dladdr.3c
705 link path=usr/share/man/man3c/dlclose.3c target=dlclose.3c
706 link path=usr/share/man/man3c/dngettext.3c target=gettext.3c
707 link path=usr/share/man/man3c/door_setparam.3c target=door_getparam.3c
708 link path=usr/share/man/man3c/door_unbind.3c target=door_bind.3c
709 link path=usr/share/man/man3c/double_to_decimal.3c \
710     target=floating_to_decimal.3c
711 link path=usr/share/man/man3c/dup3.3c target=dup2.3c
712 link path=usr/share/man/man3c/duplocale.3c target=newlocale.3c
713 link path=usr/share/man/man3c/edata.3c target=end.3c
714 link path=usr/share/man/man3c/endgrent.3c target=getgrnam.3c
715 link path=usr/share/man/man3c/endnetgrent.3c target=getnetgrent.3c
716 link path=usr/share/man/man3c/endpwent.3c target=getpwnam.3c
717 link path=usr/share/man/man3c/endspent.3c target=getspnam.3c
718 link path=usr/share/man/man3c/endusershell.3c target=getusershell.3c
719 link path=usr/share/man/man3c/endutent.3c target=getutent.3c
```

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720 link path=usr/share/man/man3c/endutxent.3c target=getutxent.3c
721 link path=usr/share/man/man3c/erand48.3c target=drand48.3c
722 link path=usr/share/man/man3c/errno.3c target=error.3c
723 link path=usr/share/man/man3c/errx.3c target=err.3c
724 link path=usr/share/man/man3c/etext.3c target=end.3c
725 link path=usr/share/man/man3c/euccol.3c target=euclen.3c
726 link path=usr/share/man/man3c/eucscol.3c target=euclen.3c
727 link path=usr/share/man/man3c/extended_to_decimal.3c \
728     target=floating_to_decimal.3c
729 link path=usr/share/man/man3c/fconvert.3c target=econvert.3c
730 link path=usr/share/man/man3c/fcvt.3c target=ecvt.3c
731 link path=usr/share/man/man3c/fdopendir.3c target=opendir.3c
732 link path=usr/share/man/man3c/fdwalk.3c target=closefrom.3c
733 link path=usr/share/man/man3c/feof.3c target=feof.3c
734 link path=usr/share/man/man3c/fgetgrent.3c target=getgrnam.3c
735 link path=usr/share/man/man3c/fgetgrent_r.3c target=getgrnam.3c
736 link path=usr/share/man/man3c/fgetpwent.3c target=getpwnam.3c
737 link path=usr/share/man/man3c/fgetpwent_r.3c target=getpwnam.3c
738 link path=usr/share/man/man3c/fgets.3c target=gets.3c
739 link path=usr/share/man/man3c/fgetspent.3c target=getspnam.3c
740 link path=usr/share/man/man3c/fgetspent_r.3c target=getspnam.3c
741 link path=usr/share/man/man3c/fgetwc_l.3c target=fgetwc.3c
742 link path=usr/share/man/man3c/fgetws.3c target=getws.3c
743 link path=usr/share/man/man3c/file_to_decimal.3c target=string_to_decimal.3c
744 link path=usr/share/man/man3c/fileno.3c target=error.3c
745 link path=usr/share/man/man3c/finite.3c target=isnan.3c
746 link path=usr/share/man/man3c/fpclass.3c target=isnan.3c
747 link path=usr/share/man/man3c/fpgetmask.3c target=fpgetround.3c
748 link path=usr/share/man/man3c/fpgetsticky.3c target=fpgetround.3c
749 link path=usr/share/man/man3c/fprintf.3c target=printf.3c
750 link path=usr/share/man/man3c/fpsetmask.3c target=fpgetround.3c
751 link path=usr/share/man/man3c/fpsetround.3c target=fpgetround.3c
752 link path=usr/share/man/man3c/fpsetsticky.3c target=fpgetround.3c
753 link path=usr/share/man/man3c/fputs.3c target=puts.3c
754 link path=usr/share/man/man3c/free.3c target=malloc.3c
755 link path=usr/share/man/man3c/freelocale.3c target=newlocale.3c
756 link path=usr/share/man/man3c/fscanf.3c target=scanf.3c
757 link path=usr/share/man/man3c/fseek.3c target=fseek.3c
758 link path=usr/share/man/man3c/fsetattr.3c target=fsetattr.3c
759 link path=usr/share/man/man3c/ftello.3c target=ftell.3c
760 link path=usr/share/man/man3c/ftruncate.3c target=truncate.3c
761 link path=usr/share/man/man3c/ftrylockfile.3c target=flockfile.3c
762 link path=usr/share/man/man3c/func_to_decimal.3c target=string_to_decimal.3c
763 link path=usr/share/man/man3c/funlockfile.3c target=flockfile.3c
764 link path=usr/share/man/man3c/gconvert.3c target=econvert.3c
765 link path=usr/share/man/man3c/gcvt.3c target=ecvt.3c
766 link path=usr/share/man/man3c/getattrat.3c target=fgetattr.3c
767 link path=usr/share/man/man3c/getc.3c target=fgetc.3c
768 link path=usr/share/man/man3c/getc_unlocked.3c target=fgetc.3c
769 link path=usr/share/man/man3c/getchar.3c target=fgetc.3c
770 link path=usr/share/man/man3c/getchar_unlocked.3c target=fgetc.3c
771 link path=usr/share/man/man3c/getdelim.3c target=getline.3c
772 link path=usr/share/man/man3c/getextmntent.3c target=getmntent.3c
773 link path=usr/share/man/man3c/getgrent.3c target=getgrnam.3c
774 link path=usr/share/man/man3c/getgrent_r.3c target=getgrnam.3c
775 link path=usr/share/man/man3c/getgrgid.3c target=getgrnam.3c
776 link path=usr/share/man/man3c/getgrgid_r.3c target=getgrnam.3c
777 link path=usr/share/man/man3c/getgrnam_r.3c target=getgrnam.3c
778 link path=usr/share/man/man3c/gethomedir.3c target=getcpuid.3c
779 link path=usr/share/man/man3c/gethrtime.3c target=gethrtime.3c
780 link path=usr/share/man/man3c/getlogin_r.3c target=getlogin.3c
781 link path=usr/share/man/man3c/getmntany.3c target=getmntent.3c
782 link path=usr/share/man/man3c/getnetgrent_r.3c target=getnetgrent.3c
783 link path=usr/share/man/man3c/getpassphrase.3c target=getpass.3c
784 link path=usr/share/man/man3c/getpwent.3c target=getpwnam.3c
785 link path=usr/share/man/man3c/getpwent_r.3c target=getpwnam.3c
```

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786 link path=usr/share/man/man3c/getpwnam_r.3c target=getpwnam.3c
787 link path=usr/share/man/man3c/getpwuid.3c target=getpwnam.3c
788 link path=usr/share/man/man3c/getpwuid_r.3c target=getpwnam.3c
789 link path=usr/share/man/man3c/getspent.3c target=getspnam.3c
790 link path=usr/share/man/man3c/getspent_r.3c target=getspnam.3c
791 link path=usr/share/man/man3c/getspnam_r.3c target=getspnam.3c
792 link path=usr/share/man/man3c/getutid.3c target=getutent.3c
793 link path=usr/share/man/man3c/getutline.3c target=getutent.3c
794 link path=usr/share/man/man3c/getutmp.3c target=getutxent.3c
795 link path=usr/share/man/man3c/getutmpx.3c target=getutxent.3c
796 link path=usr/share/man/man3c/getutxid.3c target=getutxent.3c
797 link path=usr/share/man/man3c/getutxline.3c target=getutxent.3c
798 link path=usr/share/man/man3c/getvfsany.3c target=getvfsent.3c
799 link path=usr/share/man/man3c/getvfsfile.3c target=getvfsent.3c
800 link path=usr/share/man/man3c/getvfsspec.3c target=getvfsent.3c
801 link path=usr/share/man/man3c/getw.3c target=fgetc.3c
802 link path=usr/share/man/man3c/getwc_1.3c target=getwc.3c
803 link path=usr/share/man/man3c/getwchar_1.3c target=getwchar.3c
804 link path=usr/share/man/man3c/getzoneidbyname.3c target=getzoneid.3c
805 link path=usr/share/man/man3c/getzoneidbyid.3c target=getzoneid.3c
806 link path=usr/share/man/man3c/globfree.3c target=glob.3c
807 link path=usr/share/man/man3c/gmtime.3c target=ctime.3c
808 link path=usr/share/man/man3c/gmtime_r.3c target=ctime.3c
809 link path=usr/share/man/man3c/gsignal.3c target=signal.3c
810 link path=usr/share/man/man3c/hasmntopt.3c target=getmntent.3c
811 link path=usr/share/man/man3c/hcreate.3c target=hsearch.3c
812 link path=usr/share/man/man3c/hdestroy.3c target=hsearch.3c
813 link path=usr/share/man/man3c/initstate.3c target=random.3c
814 link path=usr/share/man/man3c/innetgr.3c target=getnetgrent.3c
815 link path=usr/share/man/man3c/isalnum.3c target=ctype.3c
816 link path=usr/share/man/man3c/isalnum_1.3c target=ctype.3c
817 link path=usr/share/man/man3c/isalpha.3c target=ctype.3c
818 link path=usr/share/man/man3c/isalpha_1.3c target=ctype.3c
819 link path=usr/share/man/man3c/isascii.3c target=ctype.3c
820 link path=usr/share/man/man3c/isblank.3c target=ctype.3c
821 link path=usr/share/man/man3c/isblank_1.3c target=ctype.3c
822 link path=usr/share/man/man3c/iscntrl.3c target=ctype.3c
823 link path=usr/share/man/man3c/iscntrl_1.3c target=ctype.3c
824 link path=usr/share/man/man3c/isdigit.3c target=ctype.3c
825 link path=usr/share/man/man3c/isdigit_1.3c target=ctype.3c
826 link path=usr/share/man/man3c/isenglish.3c target=iswalpha.3c
827 link path=usr/share/man/man3c/isgraph.3c target=ctype.3c
828 link path=usr/share/man/man3c/isgraph_1.3c target=ctype.3c
829 link path=usr/share/man/man3c/isideogram.3c target=iswalpha.3c
830 link path=usr/share/man/man3c/islower.3c target=ctype.3c
831 link path=usr/share/man/man3c/islower_1.3c target=ctype.3c
832 link path=usr/share/man/man3c/isnanf.3c target=isnan.3c
833 link path=usr/share/man/man3c/isnumber.3c target=iswalpha.3c
834 link path=usr/share/man/man3c/isphonogram.3c target=iswalpha.3c
835 link path=usr/share/man/man3c/isprint.3c target=ctype.3c
836 link path=usr/share/man/man3c/isprint_1.3c target=ctype.3c
837 link path=usr/share/man/man3c/ispunct.3c target=ctype.3c
838 link path=usr/share/man/man3c/ispunct_1.3c target=ctype.3c
839 link path=usr/share/man/man3c/isspace.3c target=ctype.3c
840 link path=usr/share/man/man3c/isspace_1.3c target=ctype.3c
841 link path=usr/share/man/man3c/isspecial.3c target=iswalpha.3c
842 link path=usr/share/man/man3c/isupper.3c target=ctype.3c
843 link path=usr/share/man/man3c/isupper_1.3c target=ctype.3c
844 link path=usr/share/man/man3c/iswalnum.3c target=iswalpha.3c
845 link path=usr/share/man/man3c/iswalnum_1.3c target=iswalpha.3c
846 link path=usr/share/man/man3c/iswalpha_1.3c target=iswalpha.3c
847 link path=usr/share/man/man3c/iswascii.3c target=iswalpha.3c
848 link path=usr/share/man/man3c/iswblank.3c target=iswalpha.3c
849 link path=usr/share/man/man3c/iswblank_1.3c target=iswalpha.3c
850 link path=usr/share/man/man3c/iswcntrl.3c target=iswalpha.3c
851 link path=usr/share/man/man3c/iswcntrl_1.3c target=iswalpha.3c
```

```
852 link path=usr/share/man/man3c/iswctype_1.3c target=iswctype.3c
853 link path=usr/share/man/man3c/iswdigit.3c target=iswalpha.3c
854 link path=usr/share/man/man3c/iswdigit_1.3c target=iswalpha.3c
855 link path=usr/share/man/man3c/iswgraph.3c target=iswalpha.3c
856 link path=usr/share/man/man3c/iswgraph_1.3c target=iswalpha.3c
857 link path=usr/share/man/man3c/iswhexnumber.3c target=iswalpha.3c
858 link path=usr/share/man/man3c/iswhexnumber_1.3c target=iswalpha.3c
859 link path=usr/share/man/man3c/iswideogram.3c target=iswalpha.3c
860 link path=usr/share/man/man3c/iswideogram_1.3c target=iswalpha.3c
861 link path=usr/share/man/man3c/iswlower.3c target=iswalpha.3c
862 link path=usr/share/man/man3c/iswlower_1.3c target=iswalpha.3c
863 link path=usr/share/man/man3c/iswnumber.3c target=iswalpha.3c
864 link path=usr/share/man/man3c/iswnumber_1.3c target=iswalpha.3c
865 link path=usr/share/man/man3c/iswphonogram.3c target=iswalpha.3c
866 link path=usr/share/man/man3c/iswphonogram_1.3c target=iswalpha.3c
867 link path=usr/share/man/man3c/iswprint.3c target=iswalpha.3c
868 link path=usr/share/man/man3c/iswprint_1.3c target=iswalpha.3c
869 link path=usr/share/man/man3c/iswpunct.3c target=iswalpha.3c
870 link path=usr/share/man/man3c/iswpunct_1.3c target=iswalpha.3c
871 link path=usr/share/man/man3c/iswspace.3c target=iswalpha.3c
872 link path=usr/share/man/man3c/iswspace_1.3c target=iswalpha.3c
873 link path=usr/share/man/man3c/iswspecial.3c target=iswalpha.3c
874 link path=usr/share/man/man3c/iswspecial_1.3c target=iswalpha.3c
875 link path=usr/share/man/man3c/iswupper.3c target=iswalpha.3c
876 link path=usr/share/man/man3c/iswupper_1.3c target=iswalpha.3c
877 link path=usr/share/man/man3c/iswxdigit.3c target=iswalpha.3c
878 link path=usr/share/man/man3c/iswxdigit_1.3c target=iswalpha.3c
879 link path=usr/share/man/man3c/isxdigit.3c target=ctype.3c
880 link path=usr/share/man/man3c/isxdigit_1.3c target=ctype.3c
881 link path=usr/share/man/man3c/jrand48.3c target=drand48.3c
882 link path=usr/share/man/man3c/l64a.3c target=a64l.3c
883 link path=usr/share/man/man3c/labs.3c target=abs.3c
884 link path=usr/share/man/man3c/lcong48.3c target=drand48.3c
885 link path=usr/share/man/man3c/ldiv.3c target=div.3c
886 link path=usr/share/man/man3c/lfind.3c target=lsearch.3c
887 link path=usr/share/man/man3c/llabs.3c target=abs.3c
888 link path=usr/share/man/man3c/lldiv.3c target=div.3c
889 link path=usr/share/man/man3c/lltostr.3c target=strtol.3c
890 link path=usr/share/man/man3c/localtime.3c target=ctime.3c
891 link path=usr/share/man/man3c/localtime_r.3c target=ctime.3c
892 link path=usr/share/man/man3c/longjmp.3c target=setjmp.3c
893 link path=usr/share/man/man3c/lrand48.3c target=drand48.3c
894 link path=usr/share/man/man3c/major.3c target=makedev.3c
895 link path=usr/share/man/man3c/mblen_1.3c target=mblen.3c
896 link path=usr/share/man/man3c/mbrlen_1.3c target=mbrlen.3c
897 link path=usr/share/man/man3c/mbrtowc_1.3c target=mbrtowc.3c
898 link path=usr/share/man/man3c/mbsinit_1.3c target=mbsinit.3c
899 link path=usr/share/man/man3c/mbsnrtowcs.3c target=mbsrtowcs.3c
900 link path=usr/share/man/man3c/mbsnrtowcs_1.3c target=mbsrtowcs.3c
901 link path=usr/share/man/man3c/mbsrtowcs_1.3c target=mbsrtowcs.3c
902 link path=usr/share/man/man3c/mbstowcs.3c target=mbsrtowcs.3c
903 link path=usr/share/man/man3c/mbstowcs_1.3c target=mbsrtowcs.3c
904 link path=usr/share/man/man3c/mbtowc_1.3c target=mbtowc.3c
905 link path=usr/share/man/man3c/memalign.3c target=malloc.3c
906 link path=usr/share/man/man3c/membar_consumer.3c target=membar_ops.3c
907 link path=usr/share/man/man3c/membar_enter.3c target=membar_ops.3c
908 link path=usr/share/man/man3c/membar_exit.3c target=membar_ops.3c
909 link path=usr/share/man/man3c/membar_producer.3c target=membar_ops.3c
910 link path=usr/share/man/man3c/memccpy.3c target=memory.3c
911 link path=usr/share/man/man3c/memchr.3c target=memory.3c
912 link path=usr/share/man/man3c/memcmp.3c target=memory.3c
913 link path=usr/share/man/man3c/memcpy.3c target=memory.3c
914 link path=usr/share/man/man3c/memmove.3c target=memory.3c
915 link path=usr/share/man/man3c/memset.3c target=memory.3c
916 link path=usr/share/man/man3c/minor.3c target=makedev.3c
917 link path=usr/share/man/man3c/mktemp.3c target=mkstemp.3c
```



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918 link path=usr/share/man/man3c/mkostemp.3c target=mkstemp.3c
919 link path=usr/share/man/man3c/mkostemps.3c target=mkstemp.3c
920 link path=usr/share/man/man3c/mkstemps.3c target=mkstemp.3c
921 link path=usr/share/man/man3c/mq_reltimedreceive_np.3c target=mq_receive.3c
922 link path=usr/share/man/man3c/mq_reltimedsend_np.3c target=mq_send.3c
923 link path=usr/share/man/man3c/mq_timedreceive.3c target=mq_receive.3c
924 link path=usr/share/man/man3c/mq_timedsend.3c target=mq_send.3c
925 link path=usr/share/man/man3c/mrand48.3c target=drand48.3c
926 link path=usr/share/man/man3c/munlock.3c target=mlock.3c
927 link path=usr/share/man/man3c/munlockall.3c target=mlockall.3c
928 link path=usr/share/man/man3c/mutex_consistent.3c target=mutex_init.3c
929 link path=usr/share/man/man3c/mutex_destroy.3c target=mutex_init.3c
930 link path=usr/share/man/man3c/mutex_lock.3c target=mutex_init.3c
931 link path=usr/share/man/man3c/mutex_trylock.3c target=mutex_init.3c
932 link path=usr/share/man/man3c/mutex_unlock.3c target=mutex_init.3c
933 link path=usr/share/man/man3c/nftw.3c target=ftw.3c
934 link path=usr/share/man/man3c/ngettext.3c target=gettext.3c
935 link path=usr/share/man/man3c/nl_langinfo_l.3c target=nl_langinfo.3c
936 link path=usr/share/man/man3c/nrand48.3c target=drand48.3c
937 link path=usr/share/man/man3c/openlog.3c target=syslog.3c
938 link path=usr/share/man/man3c/pclose.3c target=popen.3c
939 link path=usr/share/man/man3c/port_dissociate.3c target=port_associate.3c
940 link path=usr/share/man/man3c/port_getn.3c target=port_get.3c
941 link path=usr/share/man/man3c/port_sendn.3c target=port_send.3c
942 link path=usr/share/man/man3c/posix_spawn_file_actions_addopen.3c \
943   target=posix_spawn_file_actions_addclose.3c
944 link path=usr/share/man/man3c/posix_spawn_file_actions_init.3c \
945   target=posix_spawn_file_actions_destroy.3c
946 link path=usr/share/man/man3c/posix_spawnattr_init.3c \
947   target=posix_spawnattr_destroy.3c
948 link path=usr/share/man/man3c/posix_spawnattr_setflags.3c \
949   target=posix_spawnattr_getflags.3c
950 link path=usr/share/man/man3c/posix_spawnattr_setpgroup.3c \
951   target=posix_spawnattr_getpgroup.3c
952 link path=usr/share/man/man3c/posix_spawnattr_setschedparam.3c \
953   target=posix_spawnattr_getschedparam.3c
954 link path=usr/share/man/man3c/posix_spawnattr_setschedpolicy.3c \
955   target=posix_spawnattr_getschedpolicy.3c
956 link path=usr/share/man/man3c/posix_spawnattr_setsigdefault.3c \
957   target=posix_spawnattr_getsigdefault.3c
958 link path=usr/share/man/man3c/posix_spawnattr_setsigignore_np.3c \
959   target=posix_spawnattr_getsigignore_np.3c
960 link path=usr/share/man/man3c/posix_spawnattr_setsigmask.3c \
961   target=posix_spawnattr_getsigmask.3c
962 link path=usr/share/man/man3c/posix_spawnnp.3c target=posix_spawn.3c
963 link path=usr/share/man/man3c/printstack.3c target=walkcontext.3c
964 link path=usr/share/man/man3c/priv_allocset.3c target=priv_addset.3c
965 link path=usr/share/man/man3c/priv_basicset.3c target=priv_addset.3c
966 link path=usr/share/man/man3c/priv_copyset.3c target=priv_addset.3c
967 link path=usr/share/man/man3c/priv_delset.3c target=priv_addset.3c
968 link path=usr/share/man/man3c/priv_emptyset.3c target=priv_addset.3c
969 link path=usr/share/man/man3c/priv_fillset.3c target=priv_addset.3c
970 link path=usr/share/man/man3c/priv_freeset.3c target=priv_addset.3c
971 link path=usr/share/man/man3c/priv_getbyname.3c target=priv_str_to_set.3c
972 link path=usr/share/man/man3c/priv_getbynum.3c target=priv_str_to_set.3c
973 link path=usr/share/man/man3c/priv_getsetbyname.3c target=priv_str_to_set.3c
974 link path=usr/share/man/man3c/priv_getsetbynum.3c target=priv_str_to_set.3c
975 link path=usr/share/man/man3c/priv_gettext.3c target=priv_str_to_set.3c
976 link path=usr/share/man/man3c/priv_ineffect.3c target=priv_set.3c
977 link path=usr/share/man/man3c/priv_intersect.3c target=priv_addset.3c
978 link path=usr/share/man/man3c/priv_inverse.3c target=priv_addset.3c
979 link path=usr/share/man/man3c/priv_isemptyset.3c target=priv_addset.3c
980 link path=usr/share/man/man3c/priv_isequalset.3c target=priv_addset.3c
981 link path=usr/share/man/man3c/priv_isfullset.3c target=priv_addset.3c
982 link path=usr/share/man/man3c/priv_ismember.3c target=priv_addset.3c
983 link path=usr/share/man/man3c/priv_issubset.3c target=priv_addset.3c

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984 link path=usr/share/man/man3c/priv_set_to_str.3c target=priv_str_to_set.3c
985 link path=usr/share/man/man3c/priv_union.3c target=priv_addset.3c
986 link path=usr/share/man/man3c/pselect.3c target=select.3c
987 link path=usr/share/man/man3c/psiginfo.3c target=psignal.3c
988 link path=usr/share/man/man3c/pthread_attr_destroy.3c \
989   target=pthread_attr_init.3c
990 link path=usr/share/man/man3c/pthread_attr_setdetachstate.3c \
991   target=pthread_attr_getdetachstate.3c
992 link path=usr/share/man/man3c/pthread_attr_setguardsize.3c \
993   target=pthread_attr_getguardsize.3c
994 link path=usr/share/man/man3c/pthread_attr_setinheritsched.3c \
995   target=pthread_attr_getinheritsched.3c
996 link path=usr/share/man/man3c/pthread_attr_setschedparam.3c \
997   target=pthread_attr_getschedparam.3c
998 link path=usr/share/man/man3c/pthread_attr_setschedpolicy.3c \
999   target=pthread_attr_getschedpolicy.3c
1000 link path=usr/share/man/man3c/pthread_attr_setscope.3c \
1001   target=pthread_attr_getscope.3c
1002 link path=usr/share/man/man3c/pthread_attr_setstack.3c \
1003   target=pthread_attr_getstack.3c
1004 link path=usr/share/man/man3c/pthread_attr_setstackaddr.3c \
1005   target=pthread_attr_getstackaddr.3c
1006 link path=usr/share/man/man3c/pthread_attr_setstacksize.3c \
1007   target=pthread_attr_getstacksize.3c
1008 link path=usr/share/man/man3c/pthread_barrier_init.3c \
1009   target=pthread_barrier_destroy.3c
1010 link path=usr/share/man/man3c/pthread_barrierattr_init.3c \
1011   target=pthread_barrierattr_destroy.3c
1012 link path=usr/share/man/man3c/pthread_barrierattr_setpshared.3c \
1013   target=pthread_barrierattr_getpshared.3c
1014 link path=usr/share/man/man3c/pthread_cond_broadcast.3c \
1015   target=pthread_cond_signal.3c
1016 link path=usr/share/man/man3c/pthread_cond_destroy.3c \
1017   target=pthread_cond_init.3c
1018 link path=usr/share/man/man3c/pthread_cond_reltimedwait_np.3c \
1019   target=pthread_cond_wait.3c
1020 link path=usr/share/man/man3c/pthread_cond_timedwait.3c \
1021   target=pthread_cond_wait.3c
1022 link path=usr/share/man/man3c/pthread_condattr_destroy.3c \
1023   target=pthread_condattr_init.3c
1024 link path=usr/share/man/man3c/pthread_condattr_setclock.3c \
1025   target=pthread_condattr_getclock.3c
1026 link path=usr/share/man/man3c/pthread_condattr_setpshared.3c \
1027   target=pthread_condattr_getpshared.3c
1028 link path=usr/share/man/man3c/pthread_key_create_once_np.3c \
1029   target=pthread_key_create.3c
1030 link path=usr/share/man/man3c/pthread_mutex_destroy.3c \
1031   target=pthread_mutex_init.3c
1032 link path=usr/share/man/man3c/pthread_mutex_reltimedlock_np.3c \
1033   target=pthread_mutex_timedlock.3c
1034 link path=usr/share/man/man3c/pthread_mutex_setprioceiling.3c \
1035   target=pthread_mutex_getprioceiling.3c
1036 link path=usr/share/man/man3c/pthread_mutex_trylock.3c \
1037   target=pthread_mutex_lock.3c
1038 link path=usr/share/man/man3c/pthread_mutex_unlock.3c \
1039   target=pthread_mutex_lock.3c
1040 link path=usr/share/man/man3c/pthread_mutexattr_destroy.3c \
1041   target=pthread_mutexattr_init.3c
1042 link path=usr/share/man/man3c/pthread_mutexattr_setprioceiling.3c \
1043   target=pthread_mutexattr_getprioceiling.3c
1044 link path=usr/share/man/man3c/pthread_mutexattr_setprotocol.3c \
1045   target=pthread_mutexattr_getprotocol.3c
1046 link path=usr/share/man/man3c/pthread_mutexattr_setpshared.3c \
1047   target=pthread_mutexattr_getpshared.3c
1048 link path=usr/share/man/man3c/pthread_mutexattr_settype.3c \
1049   target=pthread_mutexattr_gettype.3c

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1050 link path=usr/share/man/man3c/pthread_rwlock_destroy.3c \
1051     target=pthread_rwlock_init.3c
1052 link path=usr/share/man/man3c/pthread_rwlock_reltimedrdlock_np.3c \
1053     target=pthread_rwlock_timedrdlock.3c
1054 link path=usr/share/man/man3c/pthread_rwlock_reltimedwrlock_np.3c \
1055     target=pthread_rwlock_timedwrlock.3c
1056 link path=usr/share/man/man3c/pthread_rwlock_tryrdlock.3c \
1057     target=pthread_rwlock_rdlock.3c
1058 link path=usr/share/man/man3c/pthread_rwlock_trywrlock.3c \
1059     target=pthread_rwlock_wrlock.3c
1060 link path=usr/share/man/man3c/pthread_rwlockattr_destroy.3c \
1061     target=pthread_rwlockattr_init.3c
1062 link path=usr/share/man/man3c/pthread_rwlockattr_setpshared.3c \
1063     target=pthread_rwlockattr_getpshared.3c
1064 link path=usr/share/man/man3c/pthread_setconcurrency.3c \
1065     target=pthread_getconcurrency.3c
1066 link path=usr/share/man/man3c/pthread_setschedparam.3c \
1067     target=pthread_getschedparam.3c
1068 link path=usr/share/man/man3c/pthread_setspecific.3c \
1069     target=pthread_getspecific.3c
1070 link path=usr/share/man/man3c/pthread_spin_init.3c \
1071     target=pthread_spin_destroy.3c
1072 link path=usr/share/man/man3c/pthread_spin_trylock.3c \
1073     target=pthread_spin_lock.3c
1074 link path=usr/share/man/man3c/putc.3c target=fputc.3c
1075 link path=usr/share/man/man3c/putc_unlocked.3c target=fputc.3c
1076 link path=usr/share/man/man3c/putchar.3c target=fputc.3c
1077 link path=usr/share/man/man3c/putchar_unlocked.3c target=fputc.3c
1078 link path=usr/share/man/man3c/putmntent.3c target=getmntent.3c
1079 link path=usr/share/man/man3c/pututline.3c target=getutent.3c
1080 link path=usr/share/man/man3c/pututxline.3c target=getutxent.3c
1081 link path=usr/share/man/man3c/putw.3c target=fputc.3c
1082 link path=usr/share/man/man3c/putwc.3c target=fputwc.3c
1083 link path=usr/share/man/man3c/putwchar.3c target=fputwc.3c
1084 link path=usr/share/man/man3c/qeconvert.3c target=econvert.3c
1085 link path=usr/share/man/man3c/qfconvert.3c target=econvert.3c
1086 link path=usr/share/man/man3c/qgconvert.3c target=econvert.3c
1087 link path=usr/share/man/man3c/quadruple_to_decimal.3c \
1088     target=floating_to_decimal.3c
1089 link path=usr/share/man/man3c/rand_r.3c target=rand.3c
1090 link path=usr/share/man/man3c/rctlblk_get_enforced_value.3c \
1091     target=rctlblk_set_value.3c
1092 link path=usr/share/man/man3c/rctlblk_get_firing_time.3c \
1093     target=rctlblk_set_value.3c
1094 link path=usr/share/man/man3c/rctlblk_get_global_action.3c \
1095     target=rctlblk_set_value.3c
1096 link path=usr/share/man/man3c/rctlblk_get_global_flags.3c \
1097     target=rctlblk_set_value.3c
1098 link path=usr/share/man/man3c/rctlblk_get_local_action.3c \
1099     target=rctlblk_set_value.3c
1100 link path=usr/share/man/man3c/rctlblk_get_local_flags.3c \
1101     target=rctlblk_set_value.3c
1102 link path=usr/share/man/man3c/rctlblk_get_privilege.3c \
1103     target=rctlblk_set_value.3c
1104 link path=usr/share/man/man3c/rctlblk_get_recipient_pid.3c \
1105     target=rctlblk_set_value.3c
1106 link path=usr/share/man/man3c/rctlblk_get_value.3c target=rctlblk_set_value.3c
1107 link path=usr/share/man/man3c/rctlblk_set_local_action.3c \
1108     target=rctlblk_set_value.3c
1109 link path=usr/share/man/man3c/rctlblk_set_local_flags.3c \
1110     target=rctlblk_set_value.3c
1111 link path=usr/share/man/man3c/rctlblk_set_privilege.3c \
1112     target=rctlblk_set_value.3c
1113 link path=usr/share/man/man3c/rctlblk_set_recipient_pid.3c \
1114     target=rctlblk_set_value.3c
1115 link path=usr/share/man/man3c/rctlblk_size.3c target=rctlblk_set_value.3c

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1116 link path=usr/share/man/man3c/re_exec.3c target=re_comp.3c
1117 link path=usr/share/man/man3c/readdir_r.3c target=readdir.3c
1118 link path=usr/share/man/man3c/realloc.3c target=malloc.3c
1119 link path=usr/share/man/man3c/regerror.3c target=regcomp.3c
1120 link path=usr/share/man/man3c/regex.3c target=regcmp.3c
1121 link path=usr/share/man/man3c/regexec.3c target=regcomp.3c
1122 link path=usr/share/man/man3c/regfree.3c target=regcomp.3c
1123 link path=usr/share/man/man3c/remque.3c target=insque.3c
1124 link path=usr/share/man/man3c/resetmnttab.3c target=getmntent.3c
1125 link path=usr/share/man/man3c/rindex.3c target=index.3c
1126 link path=usr/share/man/man3c/rw_rdlock.3c target=rwlock.3c
1127 link path=usr/share/man/man3c/rw_tryrdlock.3c target=rwlock.3c
1128 link path=usr/share/man/man3c/rw_trywrlock.3c target=rwlock.3c
1129 link path=usr/share/man/man3c/rw_unlock.3c target=rwlock.3c
1130 link path=usr/share/man/man3c/rw_wrlock.3c target=rwlock.3c
1131 link path=usr/share/man/man3c/rwlock_destroy.3c target=rwlock.3c
1132 link path=usr/share/man/man3c/rwlock_init.3c target=rwlock.3c
1133 link path=usr/share/man/man3c/sched_get_priority_min.3c \
1134     target=sched_get_priority_max.3c
1135 link path=usr/share/man/man3c/schedctl_exit.3c target=schedctl_init.3c
1136 link path=usr/share/man/man3c/schedctl_lookup.3c target=schedctl_init.3c
1137 link path=usr/share/man/man3c/schedctl_start.3c target=schedctl_init.3c
1138 link path=usr/share/man/man3c/schedctl_stop.3c target=schedctl_init.3c
1139 link path=usr/share/man/man3c/seconvert.3c target=econvert.3c
1140 link path=usr/share/man/man3c/seed48.3c target=drand48.3c
1141 link path=usr/share/man/man3c/sem_reltimedwait_np.3c target=sem_timedwait.3c
1142 link path=usr/share/man/man3c/sem_trywait.3c target=sem_wait.3c
1143 link path=usr/share/man/man3c/sema_destroy.3c target=semaphore.3c
1144 link path=usr/share/man/man3c/sema_init.3c target=semaphore.3c
1145 link path=usr/share/man/man3c/sema_post.3c target=semaphore.3c
1146 link path=usr/share/man/man3c/sema_trywait.3c target=semaphore.3c
1147 link path=usr/share/man/man3c/sema_wait.3c target=semaphore.3c
1148 link path=usr/share/man/man3c/setattrat.3c target=fgetattr.3c
1149 link path=usr/share/man/man3c/setgrent.3c target=getgrnam.3c
1150 link path=usr/share/man/man3c/sethostname.3c target=gethostname.3c
1151 link path=usr/share/man/man3c/setlinebuf.3c target=setbuffer.3c
1152 link path=usr/share/man/man3c/setlogmask.3c target=syslog.3c
1153 link path=usr/share/man/man3c/setnetgrent.3c target=getnetgrent.3c
1154 link path=usr/share/man/man3c/setpriority.3c target=getpriority.3c
1155 link path=usr/share/man/man3c/setpwent.3c target=getpwnam.3c
1156 link path=usr/share/man/man3c/setsptent.3c target=getspnam.3c
1157 link path=usr/share/man/man3c/setstate.3c target=random.3c
1158 link path=usr/share/man/man3c/settimeofday.3c target=gettimeofday.3c
1159 link path=usr/share/man/man3c/setusershell.3c target=getusershell.3c
1160 link path=usr/share/man/man3c/setutent.3c target=getutent.3c
1161 link path=usr/share/man/man3c/setutxent.3c target=getutxent.3c
1162 link path=usr/share/man/man3c/setvbuf.3c target=setbuf.3c
1163 link path=usr/share/man/man3c/sfconvert.3c target=econvert.3c
1164 link path=usr/share/man/man3c/sgconvert.3c target=econvert.3c
1165 link path=usr/share/man/man3c/sig2str.3c target=str2sig.3c
1166 link path=usr/share/man/man3c/sigaddset.3c target=sigsetops.3c
1167 link path=usr/share/man/man3c/sigdelset.3c target=sigsetops.3c
1168 link path=usr/share/man/man3c/sigemptyset.3c target=sigsetops.3c
1169 link path=usr/share/man/man3c/sigfillset.3c target=sigsetops.3c
1170 link path=usr/share/man/man3c/sighold.3c target=sigal.3c
1171 link path=usr/share/man/man3c/sigignore.3c target=sigal.3c
1172 link path=usr/share/man/man3c/sigismember.3c target=sigsetops.3c
1173 link path=usr/share/man/man3c/siglongjmp.3c target=setjmp.3c
1174 link path=usr/share/man/man3c/sigpause.3c target=sigal.3c
1175 link path=usr/share/man/man3c/sigrelse.3c target=sigal.3c
1176 link path=usr/share/man/man3c/sigset.3c target=sigal.3c
1177 link path=usr/share/man/man3c/sigsetjmp.3c target=setjmp.3c
1178 link path=usr/share/man/man3c/sigtimedwait.3c target=sigwaitinfo.3c
1179 link path=usr/share/man/man3c/single_to_decimal.3c \
1180     target=floating_to_decimal.3c
1181 link path=usr/share/man/man3c/snprintf.3c target=printf.3c

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1182 link path=usr/share/man/man3c/sprintf.3c target=printf.3c
1183 link path=usr/share/man/man3c/srand.3c target=rand.3c
1184 link path=usr/share/man/man3c/srand48.3c target=drand48.3c
1185 link path=usr/share/man/man3c/srandom.3c target=random.3c
1186 link path=usr/share/man/man3c/sscanf.3c target=scanf.3c
1187 link path=usr/share/man/man3c/stderr.3c target=stdio.3c
1188 link path=usr/share/man/man3c/stdin.3c target=stdio.3c
1189 link path=usr/share/man/man3c/stdout.3c target=stdio.3c
1190 link path=usr/share/man/man3c/strcasecmp.3c target=string.3c
1191 link path=usr/share/man/man3c/strcasecmp_l.3c target=string.3c
1192 link path=usr/share/man/man3c/strcat.3c target=string.3c
1193 link path=usr/share/man/man3c/strchr.3c target=string.3c
1194 link path=usr/share/man/man3c/strcmp.3c target=string.3c
1195 link path=usr/share/man/man3c/strcoll_l.3c target=string.3c
1196 link path=usr/share/man/man3c/strcpy.3c target=string.3c
1197 link path=usr/share/man/man3c/strncpy.3c target=string.3c
1198 link path=usr/share/man/man3c/strdup.3c target=string.3c
1199 link path=usr/share/man/man3c/strfmon_l.3c target=string.3c
1200 link path=usr/share/man/man3c/strftime_l.3c target=string.3c
1201 link path=usr/share/man/man3c/sterror_r.3c target=string.3c
1202 link path=usr/share/man/man3c/strlcat.3c target=string.3c
1203 link path=usr/share/man/man3c/strncpy.3c target=string.3c
1204 link path=usr/share/man/man3c/strlen.3c target=string.3c
1205 link path=usr/share/man/man3c/strncasecmp.3c target=string.3c
1206 link path=usr/share/man/man3c/strncasecmp_l.3c target=string.3c
1207 link path=usr/share/man/man3c/strncat.3c target=string.3c
1208 link path=usr/share/man/man3c/strncmp.3c target=string.3c
1209 link path=usr/share/man/man3c/strncpy.3c target=string.3c
1210 link path=usr/share/man/man3c/strnlen.3c target=string.3c
1211 link path=usr/share/man/man3c/strpbrk.3c target=string.3c
1212 link path=usr/share/man/man3c/strptime_l.3c target=string.3c
1213 link path=usr/share/man/man3c/strrchr.3c target=string.3c
1214 link path=usr/share/man/man3c/strsep.3c target=string.3c
1215 link path=usr/share/man/man3c/strspn.3c target=string.3c
1216 link path=usr/share/man/man3c/strstr.3c target=string.3c
1217 link path=usr/share/man/man3c/strtof.3c target=string.3c
1218 link path=usr/share/man/man3c/strtok.3c target=string.3c
1219 link path=usr/share/man/man3c/strtok_r.3c target=string.3c
1220 link path=usr/share/man/man3c/strtold.3c target=string.3c
1221 link path=usr/share/man/man3c/strtoll.3c target=string.3c
1222 link path=usr/share/man/man3c/strtoull.3c target=string.3c
1223 link path=usr/share/man/man3c/strtoimax.3c target=string.3c
1224 link path=usr/share/man/man3c/strxfrm_l.3c target=string.3c
1225 link path=usr/share/man/man3c/swapcontext.3c target=string.3c
1226 link path=usr/share/man/man3c/swprintf.3c target=string.3c
1227 link path=usr/share/man/man3c/swscanf.3c target=string.3c
1228 link path=usr/share/man/man3c/tdelete.3c target=string.3c
1229 link path=usr/share/man/man3c/tempan.3c target=string.3c
1230 link path=usr/share/man/man3c/textdomain.3c target=string.3c
1231 link path=usr/share/man/man3c/tfind.3c target=string.3c
1232 link path=usr/share/man/man3c/thr_continue.3c target=string.3c
1233 link path=usr/share/man/man3c/thr_getspecific.3c target=string.3c
1234 link path=usr/share/man/man3c/thr_keycreate_once.3c target=string.3c
1235 link path=usr/share/man/man3c/thr_setconcurrency.3c \
1236     target=thr_getconcurrency.3c
1237 link path=usr/share/man/man3c/thr_setprio.3c target=thr_getprio.3c
1238 link path=usr/share/man/man3c/thr_setspecific.3c target=thr_keycreate.3c
1239 link path=usr/share/man/man3c/timer_getoverrun.3c target=timer_settime.3c
1240 link path=usr/share/man/man3c/timer_gettime.3c target=timer_settime.3c
1241 link path=usr/share/man/man3c/timerclear.3c target=timeradd.3c
1242 link path=usr/share/man/man3c/timercmp.3c target=timeradd.3c
1243 link path=usr/share/man/man3c/timerisset.3c target=timeradd.3c
1244 link path=usr/share/man/man3c/timersub.3c target=timeradd.3c
1245 link path=usr/share/man/man3c/tmpnam_r.3c target=tmpnam.3c
1246 link path=usr/share/man/man3c/tolower_l.3c target=tolower.3c
1247 link path=usr/share/man/man3c/toupper_l.3c target=toupper.3c

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1248 link path=usr/share/man/man3c/towctrans.3c target=wctrans.3c
1249 link path=usr/share/man/man3c/towctrans_l.3c target=wctrans.3c
1250 link path=usr/share/man/man3c/towlower_l.3c target=towlower.3c
1251 link path=usr/share/man/man3c/towupper_l.3c target=toupper.3c
1252 link path=usr/share/man/man3c/ttyname_r.3c target=string.3c
1253 link path=usr/share/man/man3c/twalk.3c target=string.3c
1254 link path=usr/share/man/man3c/tzset.3c target=string.3c
1255 link path=usr/share/man/man3c/uconv_u16tou8.3c target=uconv_u16tou32.3c
1256 link path=usr/share/man/man3c/uconv_u32tou16.3c target=uconv_u16tou32.3c
1257 link path=usr/share/man/man3c/uconv_u32tou8.3c target=uconv_u16tou32.3c
1258 link path=usr/share/man/man3c/uconv_u8tou16.3c target=uconv_u16tou32.3c
1259 link path=usr/share/man/man3c/uconv_u8tou32.3c target=uconv_u16tou32.3c
1260 link path=usr/share/man/man3c/ucrd_free.3c target=ucrd_get.3c
1261 link path=usr/share/man/man3c/ucrd_getegid.3c target=ucrd_get.3c
1262 link path=usr/share/man/man3c/ucrd_geteuid.3c target=ucrd_get.3c
1263 link path=usr/share/man/man3c/ucrd_getgroups.3c target=ucrd_get.3c
1264 link path=usr/share/man/man3c/ucrd_getlabel.3c target=ucrd_get.3c
1265 link path=usr/share/man/man3c/ucrd_getpflags.3c target=ucrd_get.3c
1266 link path=usr/share/man/man3c/ucrd_getpid.3c target=ucrd_get.3c
1267 link path=usr/share/man/man3c/ucrd_getprivset.3c target=ucrd_get.3c
1268 link path=usr/share/man/man3c/ucrd_getprojid.3c target=ucrd_get.3c
1269 link path=usr/share/man/man3c/ucrd_getruid.3c target=ucrd_get.3c
1270 link path=usr/share/man/man3c/ucrd_getruid.3c target=ucrd_get.3c
1271 link path=usr/share/man/man3c/ucrd_getsgid.3c target=ucrd_get.3c
1272 link path=usr/share/man/man3c/ucrd_getuid.3c target=ucrd_get.3c
1273 link path=usr/share/man/man3c/ucrd_getzoneid.3c target=ucrd_get.3c
1274 link path=usr/share/man/man3c/ucrd_size.3c target=ucrd_get.3c
1275 link path=usr/share/man/man3c/ulckpwdf.3c target=lockpwdf.3c
1276 link path=usr/share/man/man3c/ulltostr.3c target=string.3c
1277 link path=usr/share/man/man3c/unordered.3c target=string.3c
1278 link path=usr/share/man/man3c/updwtmp.3c target=string.3c
1279 link path=usr/share/man/man3c/updwtmpx.3c target=string.3c
1280 link path=usr/share/man/man3c/utmpname.3c target=string.3c
1281 link path=usr/share/man/man3c/utmpxname.3c target=string.3c
1282 link path=usr/share/man/man3c/valloc.3c target=string.3c
1283 link path=usr/share/man/man3c/vasprintf.3c target=string.3c
1284 link path=usr/share/man/man3c/verr.3c target=string.3c
1285 link path=usr/share/man/man3c/verrx.3c target=string.3c
1286 link path=usr/share/man/man3c/vfprintf.3c target=string.3c
1287 link path=usr/share/man/man3c/vfscanf.3c target=string.3c
1288 link path=usr/share/man/man3c/vfwscanf.3c target=string.3c
1289 link path=usr/share/man/man3c/vscanf.3c target=string.3c
1290 link path=usr/share/man/man3c/vsnprintf.3c target=string.3c
1291 link path=usr/share/man/man3c/vsprintf.3c target=string.3c
1292 link path=usr/share/man/man3c/vsscanf.3c target=string.3c
1293 link path=usr/share/man/man3c/vswprintf.3c target=string.3c
1294 link path=usr/share/man/man3c/vswscanf.3c target=string.3c
1295 link path=usr/share/man/man3c/vwarn.3c target=string.3c
1296 link path=usr/share/man/man3c/vwarnx.3c target=string.3c
1297 link path=usr/share/man/man3c/vwprintf.3c target=string.3c
1298 link path=usr/share/man/man3c/vwscanf.3c target=string.3c
1299 link path=usr/share/man/man3c/wait4.3c target=string.3c
1300 link path=usr/share/man/man3c/warn.3c target=string.3c
1301 link path=usr/share/man/man3c/warnx.3c target=string.3c
1302 link path=usr/share/man/man3c/watof.3c target=string.3c
1303 link path=usr/share/man/man3c/watoi.3c target=string.3c
1304 link path=usr/share/man/man3c/watol.3c target=string.3c
1305 link path=usr/share/man/man3c/watoll.3c target=string.3c
1306 link path=usr/share/man/man3c/wcrtomb_l.3c target=string.3c
1307 link path=usr/share/man/man3c/wcscasecmp_l.3c target=string.3c
1308 link path=usr/share/man/man3c/wcscat.3c target=string.3c
1309 link path=usr/share/man/man3c/wcschr.3c target=string.3c
1310 link path=usr/share/man/man3c/wcscmp.3c target=string.3c
1311 link path=usr/share/man/man3c/wscoll_l.3c target=string.3c
1312 link path=usr/share/man/man3c/wscpy.3c target=string.3c
1313 link path=usr/share/man/man3c/wscspn.3c target=string.3c

```

```
1314 link path=usr/share/man/man3c/wcsetno.3c target=cset.3c
1315 link path=usr/share/man/man3c/wcsncasecmp.3c target=wcscasecmp.3c
1316 link path=usr/share/man/man3c/wcsncasecmp.1.3c target=wcscasecmp.3c
1317 link path=usr/share/man/man3c/wcslen.3c target=wcstring.3c
1318 link path=usr/share/man/man3c/wcsncat.3c target=wcstring.3c
1319 link path=usr/share/man/man3c/wcsncmp.3c target=wcstring.3c
1320 link path=usr/share/man/man3c/wcsncpy.3c target=wcstring.3c
1321 link path=usr/share/man/man3c/wcsnlen.3c target=wcslen.3c
1322 link path=usr/share/man/man3c/wcsnrtombs.3c target=wcsrtombs.3c
1323 link path=usr/share/man/man3c/wcsnrtombs.1.3c target=wcsrtombs.3c
1324 link path=usr/share/man/man3c/wcsprbrk.3c target=wcstring.3c
1325 link path=usr/share/man/man3c/wcsrchr.3c target=wcstring.3c
1326 link path=usr/share/man/man3c/wcsrtombs.1.3c target=wcsrtombs.3c
1327 link path=usr/share/man/man3c/wcsspn.3c target=wcstring.3c
1328 link path=usr/share/man/man3c/wcstof.3c target=wcstod.3c
1329 link path=usr/share/man/man3c/wcstok.3c target=wcstring.3c
1330 link path=usr/share/man/man3c/wcstold.3c target=wcstod.3c
1331 link path=usr/share/man/man3c/wcstoll.3c target=wcstod.3c
1332 link path=usr/share/man/man3c/wcstoul.3c target=wcstod.3c
1333 link path=usr/share/man/man3c/wcstoumax.3c target=wcstod.3c
1334 link path=usr/share/man/man3c/wcswcs.3c target=wcstring.3c
1335 link path=usr/share/man/man3c/wcswidth.1.3c target=wcswidth.3c
1336 link path=usr/share/man/man3c/wctob.1.3c target=wctob.3c
1337 link path=usr/share/man/man3c/wctomb.1.3c target=wctomb.3c
1338 link path=usr/share/man/man3c/wctrans.1.3c target=wctrans.3c
1339 link path=usr/share/man/man3c/wctype.1.3c target=wctype.3c
1340 link path=usr/share/man/man3c/wcwidth.1.3c target=wcwidth.3c
1341 link path=usr/share/man/man3c/windex.3c target=wcstring.3c
1342 link path=usr/share/man/man3c/wordfree.3c target=wordexp.3c
1343 link path=usr/share/man/man3c/wprintf.3c target=fwprintf.3c
1344 link path=usr/share/man/man3c/wrindex.3c target=wcstring.3c
1345 link path=usr/share/man/man3c/wscanf.3c target=fwscanf.3c
1346 link path=usr/share/man/man3c/wscat.3c target=wcstring.3c
1347 link path=usr/share/man/man3c/wsch.3c target=wcstring.3c
1348 link path=usr/share/man/man3c/wscmp.3c target=wcstring.3c
1349 link path=usr/share/man/man3c/wscoll.3c target=wstring.3c
1350 link path=usr/share/man/man3c/wscoll.1.3c target=wscoll.3c
1351 link path=usr/share/man/man3c/wscpy.3c target=wcstring.3c
1352 link path=usr/share/man/man3c/wscspn.3c target=wcstring.3c
1353 link path=usr/share/man/man3c/wsdup.3c target=wstring.3c
1354 link path=usr/share/man/man3c/wslen.3c target=wcstring.3c
1355 link path=usr/share/man/man3c/wsnccasecmp.3c target=wstring.3c
1356 link path=usr/share/man/man3c/wsnccat.3c target=wcstring.3c
1357 link path=usr/share/man/man3c/wsnccmp.3c target=wcstring.3c
1358 link path=usr/share/man/man3c/wsnccpy.3c target=wcstring.3c
1359 link path=usr/share/man/man3c/wsnbrk.3c target=wcstring.3c
1360 link path=usr/share/man/man3c/wsrchr.3c target=wcstring.3c
1361 link path=usr/share/man/man3c/wsspn.3c target=wcstring.3c
1362 link path=usr/share/man/man3c/wstod.3c target=wcstod.3c
1363 link path=usr/share/man/man3c/wstok.3c target=wcstring.3c
1364 link path=usr/share/man/man3c/wstol.3c target=wcstod.3c
1365 link path=usr/share/man/man3c/wstolr.3c target=wcstod.3c
1366 link path=usr/share/man/man3c/wstolr.3c target=wcstod.3c
```

new/usr/src/pkg/manifests/system-library.man3nsl.inc

1

20896 Sun Jul 27 18:01:37 2014

new/usr/src/pkg/manifests/system-library.man3nsl.inc

Finished obsoleting interfaces for XPG7.

1 #
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10 #

12 #
13 # Copyright 2011, Richard Lowe
14 # Copyright 2012 Nexenta Systems, Inc. All rights reserved.
15 # Copyright 2014 Garrett D'Amore <garrett@damore.org>
16 #

18 file path=usr/share/man/man3nsl/dial.3nsl
19 file path=usr/share/man/man3nsl/doconfig.3nsl
20 file path=usr/share/man/man3nsl/gethostbyname.3nsl
21 file path=usr/share/man/man3nsl/gethostent.3nsl
22 file path=usr/share/man/man3nsl/getipsecalgbyname.3nsl
23 file path=usr/share/man/man3nsl/getipsecprotobyname.3nsl
24 file path=usr/share/man/man3nsl/getnetconfig.3nsl
25 file path=usr/share/man/man3nsl/getnetpath.3nsl
26 file path=usr/share/man/man3nsl/getpublickey.3nsl
27 file path=usr/share/man/man3nsl/getrpcbname.3nsl
28 file path=usr/share/man/man3nsl/netdir.3nsl
29 file path=usr/share/man/man3nsl/nlsgetcall.3nsl
30 file path=usr/share/man/man3nsl/nlsprovider.3nsl
31 file path=usr/share/man/man3nsl/nlsrequest.3nsl
32 file path=usr/share/man/man3nsl/rpc.3nsl
33 file path=usr/share/man/man3nsl/rpc_clnt_auth.3nsl
34 file path=usr/share/man/man3nsl/rpc_clnt_calls.3nsl
35 file path=usr/share/man/man3nsl/rpc_clnt_create.3nsl
36 file path=usr/share/man/man3nsl/rpc_control.3nsl
37 file path=usr/share/man/man3nsl/rpc_gss_get_error.3nsl
38 file path=usr/share/man/man3nsl/rpc_gss_get_mechanisms.3nsl
39 file path=usr/share/man/man3nsl/rpc_gss_get_principal_name.3nsl
40 file path=usr/share/man/man3nsl/rpc_gss_getcred.3nsl
41 file path=usr/share/man/man3nsl/rpc_gss_max_data_length.3nsl
42 file path=usr/share/man/man3nsl/rpc_gss_mech_to_oid.3nsl
43 file path=usr/share/man/man3nsl/rpc_gss_seccreate.3nsl
44 file path=usr/share/man/man3nsl/rpc_gss_set_callback.3nsl
45 file path=usr/share/man/man3nsl/rpc_gss_set_defaults.3nsl
46 file path=usr/share/man/man3nsl/rpc_gss_set_svc_name.3nsl
47 file path=usr/share/man/man3nsl/rpc_soc.3nsl
48 file path=usr/share/man/man3nsl/rpc_svc_calls.3nsl
49 file path=usr/share/man/man3nsl/rpc_svc_create.3nsl
50 file path=usr/share/man/man3nsl/rpc_svc_err.3nsl
51 file path=usr/share/man/man3nsl/rpc_svc_input.3nsl
52 file path=usr/share/man/man3nsl/rpc_svc_reg.3nsl
53 file path=usr/share/man/man3nsl/rpc_xdr.3nsl
54 file path=usr/share/man/man3nsl/rpcbnd.3nsl
55 file path=usr/share/man/man3nsl/rpcsec_gss.3nsl
56 file path=usr/share/man/man3nsl/secure_rpc.3nsl
57 file path=usr/share/man/man3nsl/t_accept.3nsl
58 file path=usr/share/man/man3nsl/t_alloc.3nsl
59 file path=usr/share/man/man3nsl/t_bind.3nsl
60 file path=usr/share/man/man3nsl/t_close.3nsl
61 file path=usr/share/man/man3nsl/t_connect.3nsl

new/usr/src/pkg/manifests/system-library.man3nsl.inc

2

62 file path=usr/share/man/man3nsl/t_errno.3nsl
63 file path=usr/share/man/man3nsl/t_error.3nsl
64 file path=usr/share/man/man3nsl/t_free.3nsl
65 file path=usr/share/man/man3nsl/t_getinfo.3nsl
66 file path=usr/share/man/man3nsl/t_getprotaddr.3nsl
67 file path=usr/share/man/man3nsl/t_getstate.3nsl
68 file path=usr/share/man/man3nsl/t_listen.3nsl
69 file path=usr/share/man/man3nsl/t_look.3nsl
70 file path=usr/share/man/man3nsl/t_open.3nsl
71 file path=usr/share/man/man3nsl/t_optmgmt.3nsl
72 file path=usr/share/man/man3nsl/t_rcv.3nsl
73 file path=usr/share/man/man3nsl/t_rcvconnect.3nsl
74 file path=usr/share/man/man3nsl/t_rcvdis.3nsl
75 file path=usr/share/man/man3nsl/t_rcvrel.3nsl
76 file path=usr/share/man/man3nsl/t_rcvreldata.3nsl
77 file path=usr/share/man/man3nsl/t_rcvudata.3nsl
78 file path=usr/share/man/man3nsl/t_rcvuderr.3nsl
79 file path=usr/share/man/man3nsl/t_rcvv.3nsl
80 file path=usr/share/man/man3nsl/t_rcvvudata.3nsl
81 file path=usr/share/man/man3nsl/t_snd.3nsl
82 file path=usr/share/man/man3nsl/t_snddis.3nsl
83 file path=usr/share/man/man3nsl/t_sndrel.3nsl
84 file path=usr/share/man/man3nsl/t_sndreldata.3nsl
85 file path=usr/share/man/man3nsl/t_sndudata.3nsl
86 file path=usr/share/man/man3nsl/t_sndv.3nsl
87 file path=usr/share/man/man3nsl/t_sndvudata.3nsl
88 file path=usr/share/man/man3nsl/t_strerror.3nsl
89 file path=usr/share/man/man3nsl/t_sync.3nsl
90 file path=usr/share/man/man3nsl/t_sysconf.3nsl
91 file path=usr/share/man/man3nsl/t_unbind.3nsl
92 file path=usr/share/man/man3nsl/xdr.3nsl
93 file path=usr/share/man/man3nsl/xdr_admin.3nsl
94 file path=usr/share/man/man3nsl/xdr_complex.3nsl
95 file path=usr/share/man/man3nsl/xdr_create.3nsl
96 file path=usr/share/man/man3nsl/xdr_simple.3nsl
97 file path=usr/share/man/man3nsl/yp_update.3nsl
98 file path=usr/share/man/man3nsl/ypclnt.3nsl
99 link path=usr/share/man/man3nsl/auth_destroy.3nsl target=rpc_clnt_auth.3nsl
100 link path=usr/share/man/man3nsl/authdes_create.3nsl target=rpc_soc.3nsl
101 link path=usr/share/man/man3nsl/authdes_getucrd.3nsl target=secure_rpc.3nsl
102 link path=usr/share/man/man3nsl/authdes_seccreate.3nsl target=secure_rpc.3nsl
103 link path=usr/share/man/man3nsl/authnone_create.3nsl target=rpc_clnt_auth.3nsl
104 link path=usr/share/man/man3nsl/authsys_create.3nsl target=rpc_clnt_auth.3nsl
105 link path=usr/share/man/man3nsl/authsys_create_default.3nsl \
106 target=rpc_clnt_auth.3nsl
107 link path=usr/share/man/man3nsl/authunix_create.3nsl target=rpc_soc.3nsl
108 link path=usr/share/man/man3nsl/authunix_create_default.3nsl \
109 target=rpc_soc.3nsl
110 link path=usr/share/man/man3nsl/callrpc.3nsl target=rpc_soc.3nsl
111 link path=usr/share/man/man3nsl/clnt_broadcast.3nsl target=rpc_soc.3nsl
112 link path=usr/share/man/man3nsl/clnt_call.3nsl target=rpc_clnt_calls.3nsl
113 link path=usr/share/man/man3nsl/clnt_control.3nsl target=rpc_clnt_create.3nsl
114 link path=usr/share/man/man3nsl/clnt_create.3nsl target=rpc_clnt_create.3nsl
115 link path=usr/share/man/man3nsl/clnt_create_timed.3nsl \
116 target=rpc_clnt_create.3nsl
117 link path=usr/share/man/man3nsl/clnt_create_vers.3nsl \
118 target=rpc_clnt_create.3nsl
119 link path=usr/share/man/man3nsl/clnt_create_vers_timed.3nsl \
120 target=rpc_clnt_create.3nsl
121 link path=usr/share/man/man3nsl/clnt_destroy.3nsl target=rpc_clnt_create.3nsl
122 link path=usr/share/man/man3nsl/clnt_dg_create.3nsl \
123 target=rpc_clnt_create.3nsl
124 link path=usr/share/man/man3nsl/clnt_door_create.3nsl \
125 target=rpc_clnt_create.3nsl
126 link path=usr/share/man/man3nsl/clnt_freeres.3nsl target=rpc_clnt_calls.3nsl
127 link path=usr/share/man/man3nsl/clnt_geterr.3nsl target=rpc_clnt_calls.3nsl

```
128 link path=usr/share/man/man3nsl/clnt_pcreateerror.3nsl \
129     target=rpc_clnt_create.3nsl
130 link path=usr/share/man/man3nsl/clnt_perrno.3nsl target=rpc_clnt_calls.3nsl
131 link path=usr/share/man/man3nsl/clnt_perror.3nsl target=rpc_clnt_calls.3nsl
132 link path=usr/share/man/man3nsl/clnt_raw_create.3nsl \
133     target=rpc_clnt_create.3nsl
134 link path=usr/share/man/man3nsl/clnt_send.3nsl target=rpc_clnt_calls.3nsl
135 link path=usr/share/man/man3nsl/clnt_spccreateerror.3nsl \
136     target=rpc_clnt_create.3nsl
137 link path=usr/share/man/man3nsl/clnt_sperrno.3nsl target=rpc_clnt_calls.3nsl
138 link path=usr/share/man/man3nsl/clnt_sperror.3nsl target=rpc_clnt_calls.3nsl
139 link path=usr/share/man/man3nsl/clnt_tli_create.3nsl \
140     target=rpc_clnt_create.3nsl
141 link path=usr/share/man/man3nsl/clnt_tp_create.3nsl \
142     target=rpc_clnt_create.3nsl
143 link path=usr/share/man/man3nsl/clnt_tp_create_timed.3nsl \
144     target=rpc_clnt_create.3nsl
145 link path=usr/share/man/man3nsl/clnt_vc_create.3nsl \
146     target=rpc_clnt_create.3nsl
147 link path=usr/share/man/man3nsl/clntraw_create.3nsl target=rpc_soc.3nsl
148 link path=usr/share/man/man3nsl/clnttcp_create.3nsl target=rpc_soc.3nsl
149 link path=usr/share/man/man3nsl/clntudp_bufcreate.3nsl target=rpc_soc.3nsl
150 link path=usr/share/man/man3nsl/clntudp_create.3nsl target=rpc_soc.3nsl
151 link path=usr/share/man/man3nsl/endhostent.3nsl target=gethostent.3nsl
152 link path=usr/share/man/man3nsl/endhostent.3nsl target=gethostbyname.3nsl
153 link path=usr/share/man/man3nsl/endnetconfig.3nsl target=getnetconfig.3nsl
154 link path=usr/share/man/man3nsl/endnetpath.3nsl target=getnetpath.3nsl
155 link path=usr/share/man/man3nsl/ndrpercent.3nsl target=getrpcbyname.3nsl
156 link path=usr/share/man/man3nsl/freeipsecalg.3nsl \
157     target=getipsecalgbyname.3nsl
158 link path=usr/share/man/man3nsl/freenetconfig.3nsl target=getnetconfig.3nsl
159 link path=usr/share/man/man3nsl/get_myaddress.3nsl target=rpc_soc.3nsl
160 link path=usr/share/man/man3nsl/gethostbyaddr.3nsl target=gethostbyname.3nsl
161 link path=usr/share/man/man3nsl/gethostbyaddr_r.3nsl target=gethostbyname.3nsl
162 link path=usr/share/man/man3nsl/gethostbyname_r.3nsl target=gethostbyname.3nsl
163 link path=usr/share/man/man3nsl/gethostent.3nsl target=gethostbyname.3nsl
164 link path=usr/share/man/man3nsl/gethostent_r.3nsl target=gethostbyname.3nsl
165 link path=usr/share/man/man3nsl/getipsecalgbyname.3nsl \
166     target=getipsecalgbyname.3nsl
167 link path=usr/share/man/man3nsl/getipsecprotobyname.3nsl \
168     target=getipsecprotobyname.3nsl
169 link path=usr/share/man/man3nsl/getnetconfig.3nsl target=getnetconfig.3nsl
170 link path=usr/share/man/man3nsl/getnetname.3nsl target=secure_rpc.3nsl
171 link path=usr/share/man/man3nsl/getrpcbyname_r.3nsl target=getrpcbyname.3nsl
172 link path=usr/share/man/man3nsl/getrpcbyname_r.3nsl target=getrpcbyname.3nsl
173 link path=usr/share/man/man3nsl/getrpcbyname_r.3nsl target=getrpcbyname.3nsl
174 link path=usr/share/man/man3nsl/getrpcport.3nsl target=rpc_soc.3nsl
175 link path=usr/share/man/man3nsl/getsecretkey.3nsl target=getpublickey.3nsl
176 link path=usr/share/man/man3nsl/host2netname.3nsl target=secure_rpc.3nsl
177 link path=usr/share/man/man3nsl/key_decryptsession.3nsl target=secure_rpc.3nsl
178 link path=usr/share/man/man3nsl/key_encryptsession.3nsl target=secure_rpc.3nsl
179 link path=usr/share/man/man3nsl/key_gendes.3nsl target=secure_rpc.3nsl
180 link path=usr/share/man/man3nsl/key_secretkey_is_set.3nsl \
181     target=secure_rpc.3nsl
182 link path=usr/share/man/man3nsl/key_setsecret.3nsl target=secure_rpc.3nsl
183 link path=usr/share/man/man3nsl/nc_perror.3nsl target=getnetconfig.3nsl
184 link path=usr/share/man/man3nsl/nc_sperror.3nsl target=getnetconfig.3nsl
185 link path=usr/share/man/man3nsl/netdir_free.3nsl target=netdir.3nsl
186 link path=usr/share/man/man3nsl/netdir_getbyaddr.3nsl target=netdir.3nsl
187 link path=usr/share/man/man3nsl/netdir_getbyname.3nsl target=netdir.3nsl
188 link path=usr/share/man/man3nsl/netdir_mergeaddr.3nsl target=netdir.3nsl
189 link path=usr/share/man/man3nsl/netdir_options.3nsl target=netdir.3nsl
190 link path=usr/share/man/man3nsl/netdir_perror.3nsl target=netdir.3nsl
```

```
191 link path=usr/share/man/man3nsl/netdir_sperror.3nsl target=netdir.3nsl
192 link path=usr/share/man/man3nsl/netname2host.3nsl target=secure_rpc.3nsl
193 link path=usr/share/man/man3nsl/netname2user.3nsl target=secure_rpc.3nsl
194 link path=usr/share/man/man3nsl/pmap_getmaps.3nsl target=rpc_soc.3nsl
195 link path=usr/share/man/man3nsl/pmap_getport.3nsl target=rpc_soc.3nsl
196 link path=usr/share/man/man3nsl/pmap_rmtcall.3nsl target=rpc_soc.3nsl
197 link path=usr/share/man/man3nsl/pmap_set.3nsl target=rpc_soc.3nsl
198 link path=usr/share/man/man3nsl/pmap_unset.3nsl target=rpc_soc.3nsl
199 link path=usr/share/man/man3nsl/publickey.3nsl target=getpublickey.3nsl
200 link path=usr/share/man/man3nsl/registerrrpc.3nsl target=rpc_soc.3nsl
201 link path=usr/share/man/man3nsl/rpc_broadcast.3nsl target=rpc_clnt_calls.3nsl
202 link path=usr/share/man/man3nsl/rpc_broadcast_exp.3nsl \
203     target=rpc_clnt_calls.3nsl
204 link path=usr/share/man/man3nsl/rpc_call.3nsl target=rpc_clnt_calls.3nsl
205 link path=usr/share/man/man3nsl/rpc_createerr.3nsl target=rpc_clnt_create.3nsl
206 link path=usr/share/man/man3nsl/rpc_gss_get_mech_info.3nsl \
207     target=rpc_gss_get_mechanisms.3nsl
208 link path=usr/share/man/man3nsl/rpc_gss_get_versions.3nsl \
209     target=rpc_gss_get_mechanisms.3nsl
210 link path=usr/share/man/man3nsl/rpc_gss_is_installed.3nsl \
211     target=rpc_gss_get_mechanisms.3nsl
212 link path=usr/share/man/man3nsl/rpc_gss_qop_to_num.3nsl \
213     target=rpc_gss_mech_to_oid.3nsl
214 link path=usr/share/man/man3nsl/rpc_gss_svc_max_data_length.3nsl \
215     target=rpc_gss_max_data_length.3nsl
216 link path=usr/share/man/man3nsl/rpc_reg.3nsl target=rpc_svc_reg.3nsl
217 link path=usr/share/man/man3nsl/rpcb_getaddr.3nsl target=rpcbind.3nsl
218 link path=usr/share/man/man3nsl/rpcb_getmaps.3nsl target=rpcbind.3nsl
219 link path=usr/share/man/man3nsl/rpcb_gettime.3nsl target=rpcbind.3nsl
220 link path=usr/share/man/man3nsl/rpcb_rmtcall.3nsl target=rpcbind.3nsl
221 link path=usr/share/man/man3nsl/rpcb_set.3nsl target=rpcbind.3nsl
222 link path=usr/share/man/man3nsl/rpcb_unset.3nsl target=rpcbind.3nsl
223 link path=usr/share/man/man3nsl/sethostent.3nsl target=gethostent.3nsl
224 link path=usr/share/man/man3nsl/setnetconfig.3nsl target=getnetconfig.3nsl
225 link path=usr/share/man/man3nsl/setnetpath.3nsl target=getnetpath.3nsl
226 link path=usr/share/man/man3nsl/setrpcent.3nsl target=getrpcbyname.3nsl
227 link path=usr/share/man/man3nsl/svc_add_input.3nsl target=rpc_svc_input.3nsl
228 link path=usr/share/man/man3nsl/svc_auth_reg.3nsl target=rpc_svc_reg.3nsl
229 link path=usr/share/man/man3nsl/svc_control.3nsl target=rpc_svc_create.3nsl
230 link path=usr/share/man/man3nsl/svc_create.3nsl target=rpc_svc_create.3nsl
231 link path=usr/share/man/man3nsl/svc_destroy.3nsl target=rpc_svc_create.3nsl
232 link path=usr/share/man/man3nsl/svc_dg_create.3nsl target=rpc_svc_create.3nsl
233 link path=usr/share/man/man3nsl/svc_dg_enablecache.3nsl \
234     target=rpc_svc_calls.3nsl
235 link path=usr/share/man/man3nsl/svc_done.3nsl target=rpc_svc_calls.3nsl
236 link path=usr/share/man/man3nsl/svc_door_create.3nsl \
237     target=rpc_svc_create.3nsl
238 link path=usr/share/man/man3nsl/svc_exit.3nsl target=rpc_svc_calls.3nsl
239 link path=usr/share/man/man3nsl/svc_fd_create.3nsl target=rpc_svc_create.3nsl
240 link path=usr/share/man/man3nsl/svc_fd_negotiate_ucred.3nsl \
241     target=rpc_svc_calls.3nsl
242 link path=usr/share/man/man3nsl/svc_fds.3nsl target=rpc_soc.3nsl
243 link path=usr/share/man/man3nsl/svc_fdset.3nsl target=rpc_svc_calls.3nsl
244 link path=usr/share/man/man3nsl/svc_freeargs.3nsl target=rpc_svc_calls.3nsl
245 link path=usr/share/man/man3nsl/svc_getargs.3nsl target=rpc_svc_calls.3nsl
246 link path=usr/share/man/man3nsl/svc_getcaller.3nsl target=rpc_soc.3nsl
247 link path=usr/share/man/man3nsl/svc_getcallerucred.3nsl \
248     target=rpc_svc_calls.3nsl
249 link path=usr/share/man/man3nsl/svc_getreq.3nsl target=rpc_soc.3nsl
250 link path=usr/share/man/man3nsl/svc_getreq_common.3nsl \
251     target=rpc_svc_calls.3nsl
252 link path=usr/share/man/man3nsl/svc_getreq_poll.3nsl target=rpc_svc_calls.3nsl
253 link path=usr/share/man/man3nsl/svc_getreqset.3nsl target=rpc_svc_calls.3nsl
254 link path=usr/share/man/man3nsl/svc_getrpccaller.3nsl \
255     target=rpc_svc_calls.3nsl
```

```
256 link path=usr/share/man/man3nsl/svc_max_pollfd.3nsl target=rpc_svc_calls.3nsl
257 link path=usr/share/man/man3nsl/svc_pollfd.3nsl target=rpc_svc_calls.3nsl
258 link path=usr/share/man/man3nsl/svc_raw_create.3nsl target=rpc_svc_create.3nsl
259 link path=usr/share/man/man3nsl/svc_reg.3nsl target=rpc_svc_reg.3nsl
260 link path=usr/share/man/man3nsl/svc_register.3nsl target=rpc_soc.3nsl
261 link path=usr/share/man/man3nsl/svc_remove_input.3nsl \
262   target=rpc_svc_input.3nsl
263 link path=usr/share/man/man3nsl/svc_run.3nsl target=rpc_svc_calls.3nsl
264 link path=usr/share/man/man3nsl/svc_sendreply.3nsl target=rpc_svc_calls.3nsl
265 link path=usr/share/man/man3nsl/svc_tli_create.3nsl target=rpc_svc_create.3nsl
266 link path=usr/share/man/man3nsl/svc_tp_create.3nsl target=rpc_svc_create.3nsl
267 link path=usr/share/man/man3nsl/svc_unreg.3nsl target=rpc_svc_reg.3nsl
268 link path=usr/share/man/man3nsl/svc_unregister.3nsl target=rpc_soc.3nsl
269 link path=usr/share/man/man3nsl/svc_vc_create.3nsl target=rpc_svc_create.3nsl
270 link path=usr/share/man/man3nsl/svcerr_auth.3nsl target=rpc_svc_err.3nsl
271 link path=usr/share/man/man3nsl/svcerr_decode.3nsl target=rpc_svc_err.3nsl
272 link path=usr/share/man/man3nsl/svcerr_noproc.3nsl target=rpc_svc_err.3nsl
273 link path=usr/share/man/man3nsl/svcerr_noprog.3nsl target=rpc_svc_err.3nsl
274 link path=usr/share/man/man3nsl/svcerr_progrvers.3nsl target=rpc_svc_err.3nsl
275 link path=usr/share/man/man3nsl/svcerr_systemerr.3nsl target=rpc_svc_err.3nsl
276 link path=usr/share/man/man3nsl/svcerr_weakauth.3nsl target=rpc_svc_err.3nsl
277 link path=usr/share/man/man3nsl/svcfd_create.3nsl target=rpc_soc.3nsl
278 link path=usr/share/man/man3nsl/svcraw_create.3nsl target=rpc_soc.3nsl
279 link path=usr/share/man/man3nsl/svctcp_create.3nsl target=rpc_soc.3nsl
280 link path=usr/share/man/man3nsl/svcudp_bufcreate.3nsl target=rpc_soc.3nsl
281 link path=usr/share/man/man3nsl/svcudp_create.3nsl target=rpc_soc.3nsl
282 link path=usr/share/man/man3nsl/taddr2uaddr.3nsl target=netdir.3nsl
283 link path=usr/share/man/man3nsl/uaddr2taddr.3nsl target=netdir.3nsl
284 link path=usr/share/man/man3nsl/undial.3nsl target=dial.3nsl
285 link path=usr/share/man/man3nsl/user2netname.3nsl target=secure_rpc.3nsl
286 link path=usr/share/man/man3nsl/xdr_accepted_reply.3nsl target=rpc_xdr.3nsl
287 link path=usr/share/man/man3nsl/xdr_array.3nsl target=xdr_complex.3nsl
288 link path=usr/share/man/man3nsl/xdr_authsys_parms.3nsl target=rpc_xdr.3nsl
289 link path=usr/share/man/man3nsl/xdr_authunix_parms.3nsl target=rpc_soc.3nsl
290 link path=usr/share/man/man3nsl/xdr_bool.3nsl target=xdr_simple.3nsl
291 link path=usr/share/man/man3nsl/xdr_bytes.3nsl target=xdr_complex.3nsl
292 link path=usr/share/man/man3nsl/xdr_callhdr.3nsl target=rpc_xdr.3nsl
293 link path=usr/share/man/man3nsl/xdr_callmsg.3nsl target=rpc_xdr.3nsl
294 link path=usr/share/man/man3nsl/xdr_char.3nsl target=xdr_simple.3nsl
295 link path=usr/share/man/man3nsl/xdr_control.3nsl target=xdr_admin.3nsl
296 link path=usr/share/man/man3nsl/xdr_destroy.3nsl target=xdr_create.3nsl
297 link path=usr/share/man/man3nsl/xdr_double.3nsl target=xdr_simple.3nsl
298 link path=usr/share/man/man3nsl/xdr_enum.3nsl target=xdr_simple.3nsl
299 link path=usr/share/man/man3nsl/xdr_float.3nsl target=xdr_simple.3nsl
300 link path=usr/share/man/man3nsl/xdr_free.3nsl target=xdr_simple.3nsl
301 link path=usr/share/man/man3nsl/xdr_getpos.3nsl target=xdr_admin.3nsl
302 link path=usr/share/man/man3nsl/xdr_hyper.3nsl target=xdr_simple.3nsl
303 link path=usr/share/man/man3nsl/xdr_inline.3nsl target=xdr_admin.3nsl
304 link path=usr/share/man/man3nsl/xdr_int.3nsl target=xdr_simple.3nsl
305 link path=usr/share/man/man3nsl/xdr_long.3nsl target=xdr_simple.3nsl
306 link path=usr/share/man/man3nsl/xdr_longlong_t.3nsl target=xdr_simple.3nsl
307 link path=usr/share/man/man3nsl/xdr_opaque.3nsl target=xdr_complex.3nsl
308 link path=usr/share/man/man3nsl/xdr_opaque_auth.3nsl target=rpc_xdr.3nsl
309 link path=usr/share/man/man3nsl/xdr_pointer.3nsl target=xdr_complex.3nsl
310 link path=usr/share/man/man3nsl/xdr_quadruple.3nsl target=xdr_simple.3nsl
311 link path=usr/share/man/man3nsl/xdr_reference.3nsl target=xdr_complex.3nsl
312 link path=usr/share/man/man3nsl/xdr_rejected_reply.3nsl target=rpc_xdr.3nsl
313 link path=usr/share/man/man3nsl/xdr_replymsg.3nsl target=rpc_xdr.3nsl
314 link path=usr/share/man/man3nsl/xdr_setpos.3nsl target=xdr_admin.3nsl
315 link path=usr/share/man/man3nsl/xdr_short.3nsl target=xdr_simple.3nsl
316 link path=usr/share/man/man3nsl/xdr_sizeof.3nsl target=xdr_admin.3nsl
317 link path=usr/share/man/man3nsl/xdr_string.3nsl target=xdr_complex.3nsl
318 link path=usr/share/man/man3nsl/xdr_u_char.3nsl target=xdr_simple.3nsl
319 link path=usr/share/man/man3nsl/xdr_u_hyper.3nsl target=xdr_simple.3nsl
320 link path=usr/share/man/man3nsl/xdr_u_int.3nsl target=xdr_simple.3nsl
321 link path=usr/share/man/man3nsl/xdr_u_long.3nsl target=xdr_simple.3nsl
```

```
322 link path=usr/share/man/man3nsl/xdr_u_longlong_t.3nsl target=xdr_simple.3nsl
323 link path=usr/share/man/man3nsl/xdr_u_short.3nsl target=xdr_simple.3nsl
324 link path=usr/share/man/man3nsl/xdr_union.3nsl target=xdr_complex.3nsl
325 link path=usr/share/man/man3nsl/xdr_vector.3nsl target=xdr_complex.3nsl
326 link path=usr/share/man/man3nsl/xdr_void.3nsl target=xdr_simple.3nsl
327 link path=usr/share/man/man3nsl/xdr_wrapstring.3nsl target=xdr_complex.3nsl
328 link path=usr/share/man/man3nsl/xdrmem_create.3nsl target=xdr_create.3nsl
329 link path=usr/share/man/man3nsl/xdrrec_create.3nsl target=xdr_create.3nsl
330 link path=usr/share/man/man3nsl/xdrrec_endofrecord.3nsl target=xdr_admin.3nsl
331 link path=usr/share/man/man3nsl/xdrrec_eof.3nsl target=xdr_admin.3nsl
332 link path=usr/share/man/man3nsl/xdrrec_readbytes.3nsl target=xdr_admin.3nsl
333 link path=usr/share/man/man3nsl/xdrrec_skiprecord.3nsl target=xdr_admin.3nsl
334 link path=usr/share/man/man3nsl/xdrstdio_create.3nsl target=xdr_create.3nsl
335 link path=usr/share/man/man3nsl/xprt_register.3nsl target=rpc_svc_reg.3nsl
336 link path=usr/share/man/man3nsl/xprt_unregister.3nsl target=rpc_svc_reg.3nsl
337 link path=usr/share/man/man3nsl/yp_all.3nsl target=ypclnt.3nsl
338 link path=usr/share/man/man3nsl/yp_bind.3nsl target=ypclnt.3nsl
339 link path=usr/share/man/man3nsl/yp_first.3nsl target=ypclnt.3nsl
340 link path=usr/share/man/man3nsl/yp_get_default_domain.3nsl target=ypclnt.3nsl
341 link path=usr/share/man/man3nsl/yp_master.3nsl target=ypclnt.3nsl
342 link path=usr/share/man/man3nsl/yp_match.3nsl target=ypclnt.3nsl
343 link path=usr/share/man/man3nsl/yp_next.3nsl target=ypclnt.3nsl
344 link path=usr/share/man/man3nsl/yp_order.3nsl target=ypclnt.3nsl
345 link path=usr/share/man/man3nsl/yp_unbind.3nsl target=ypclnt.3nsl
346 link path=usr/share/man/man3nsl/yperr_string.3nsl target=ypclnt.3nsl
347 link path=usr/share/man/man3nsl/ypprot_err.3nsl target=ypclnt.3nsl
```

new/usr/src/uts/common/sys/feature_tests.h

1

```
*****
16741 Sun Jul 27 18:01:37 2014
new/usr/src/uts/common/sys/feature_tests.h
Finished obsoleting interfaces for XPG7.
*****

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 */

22 /*
23  * Copyright 2006 Sun Microsystems, Inc. All rights reserved.
24  * Use is subject to license terms.
25 */
26 /*
27  * Copyright 2013 Garrett D'Amore <garrett@damore.org>
28 */

30 #ifndef _SYS_FEATURE_TESTS_H
31 #define _SYS_FEATURE_TESTS_H

33 #include <sys/ccompile.h>
34 #include <sys/isa_defs.h>

36 #ifdef __cplusplus
37 extern "C" {
38 #endif

40 /*
41  * Values of _POSIX_C_SOURCE
42  *
43  *      undefined    not a POSIX compilation
44  *      1             POSIX.1-1990 compilation
45  *      2             POSIX.2-1992 compilation
46  *      199309L       POSIX.1b-1993 compilation (Real Time)
47  *      199506L       POSIX.1c-1995 compilation (POSIX Threads)
48  *      200112L       POSIX.1-2001 compilation (Austin Group Revision)
49  *      200809L       POSIX.1-2008 compilation
50 */
51 #if defined(_POSIX_SOURCE) && !defined(_POSIX_C_SOURCE)
52 #define _POSIX_C_SOURCE 1
53 #endif

55 /*
56  * The feature test macros __XOPEN_OR_POSIX, _STRICT_STDC, _STRICT_SYMBOLS,
57  * and _STDC_C99 are Sun implementation specific macros created in order to
58  * compress common standards specified feature test macros for easier reading.
59  * These macros should not be used by the application developer as
60  * unexpected results may occur. Instead, the user should reference
61  * standards(5) for correct usage of the standards feature test macros.
```

new/usr/src/uts/common/sys/feature_tests.h

2

```
62 *
63 * __XOPEN_OR_POSIX    Used in cases where a symbol is defined by both
64 *                      X/Open or POSIX or in the negative, when neither
65 *                      X/Open or POSIX defines a symbol.
66 *
67 * _STRICT_STDC        __STDC__ is specified by the C Standards and defined
68 *                      by the compiler. For Sun compilers the value of
69 *                      __STDC__ is either 1, 0, or not defined based on the
70 *                      compilation mode (see cc(1)). When the value of
71 *                      __STDC__ is 1 and in the absence of any other feature
72 *                      test macros, the namespace available to the application
73 *                      is limited to only those symbols defined by the C
74 *                      Standard. _STRICT_STDC provides a more readable means
75 *                      of identifying symbols defined by the standard, or in
76 *                      the negative, symbols that are extensions to the C
77 *                      Standard. See additional comments for GNU C differences.
78 *
79 * _STDC_C99           __STDC_VERSION__ is specified by the C standards and
80 *                      defined by the compiler and indicates the version of
81 *                      the C standard. A value of 199901L indicates a
82 *                      compiler that complies with ISO/IEC 9899:1999, other-
83 *                      wise known as the C99 standard.
84 *
85 * _STRICT_SYMBOLS     Used in cases where symbol visibility is restricted
86 *                      by the standards, and the user has not explicitly
87 *                      relaxed the strictness via __EXTENSIONS__.
88 */

90 #if defined(_XOPEN_SOURCE) || defined(_POSIX_C_SOURCE)
91 #define __XOPEN_OR_POSIX
92 #endif

94 /*
95  * ISO/IEC 9899:1990 and it's revision, ISO/IEC 9899:1999 specify the
96  * following predefined macro name:
97  *
98  * __STDC__           The integer constant 1, intended to indicate a conforming
99  *                      implementation.
100 *
101 * Furthermore, a strictly conforming program shall use only those features
102 * of the language and library specified in these standards. A conforming
103 * implementation shall accept any strictly conforming program.
104 *
105 * Based on these requirements, Sun's C compiler defines __STDC__ to 1 for
106 * strictly conforming environments and __STDC__ to 0 for environments that
107 * use ANSI C semantics but allow extensions to the C standard. For non-ANSI
108 * C semantics, Sun's C compiler does not define __STDC__.
109 *
110 * The GNU C project interpretation is that __STDC__ should always be defined
111 * to 1 for compilation modes that accept ANSI C syntax regardless of whether
112 * or not extensions to the C standard are used. Violations of conforming
113 * behavior are conditionally flagged as warnings via the use of the
114 * -pedantic option. In addition to defining __STDC__ to 1, the GNU C
115 * compiler also defines _STRICT_ANSI__ as a means of specifying strictly
116 * conforming environments using the -ansi or -std=<standard> options.
117 *
118 * In the absence of any other compiler options, Sun and GNU set the value
119 * of __STDC__ as follows when using the following options:
120 *
121 *      Value of __STDC__  __STRICT_ANSI__
122 *
123 * cc -Xa (default)                0                undefined
124 * cc -Xt (transitional)            0                undefined
125 * cc -Xc (strictly conforming)     1                undefined
126 * cc -Xs (K&R C)                  undefined         undefined
127 *
```



```

128 * gcc (default) 1 undefined
129 * gcc -ansi, -std={c89, c99,...} 1 defined
130 * gcc -traditional (K&R) undefined undefined
131 *
132 * The default compilation modes for Sun C compilers versus GNU C compilers
133 * results in a differing value for __STDC__ which results in a more
134 * restricted namespace when using Sun compilers. To allow both GNU and Sun
135 * interpretations to peacefully co-exist, we use the following Sun
136 * implementation _STRICT_STDC_ macro:
137 */

139 #if (__STDC__ - 0 == 1 && !defined(__GNUC__)) || \
140     (defined(__GNUC__) && defined(__STRICT_ANSI__))
141 #define _STRICT_STDC
142 #else
143 #undef _STRICT_STDC
144 #endif

146 /*
147 * Compiler complies with ISO/IEC 9899:1999
148 */

150 #if __STDC_VERSION__ - 0 >= 199901L
151 #define _STDC_C99
152 #endif

154 /*
155 * Use strict symbol visibility.
156 */
157 #if (defined(_STRICT_STDC) || defined(__XOPEN_OR_POSIX)) && \
158     !defined(__EXTENSIONS__)
159 #define _STRICT_SYMBOLS
160 #endif

162 /*
163 * Large file interfaces:
164 *
165 * _LARGEFILE_SOURCE 1 large file-related additions to POSIX
166 * interfaces requested (fseeko, etc.)
167 *
168 * _LARGEFILE64_SOURCE 1 transitional large-file-related interfaces
169 * requested (seek64, stat64, etc.)
170 *
171 *
172 * The corresponding announcement macros are respectively:
173 * _LFS_LARGEFILE
174 * _LFS64_LARGEFILE
175 * (These are set in <unistd.h>.)
176 *
177 * Requesting _LARGEFILE64_SOURCE implies requesting _LARGEFILE_SOURCE as
178 * well.
179 *
180 * The large file interfaces are made visible regardless of the initial values
181 * of the feature test macros under certain circumstances:
182 * - If no explicit standards-conforming environment is requested (neither
183 * of _POSIX_SOURCE nor _XOPEN_SOURCE is defined and the value of
184 * __STDC__ does not imply standards conformance).
185 * - Extended system interfaces are explicitly requested (__EXTENSIONS__
186 * is defined).
187 * - Access to in-kernel interfaces is requested (_KERNEL or _KMEMUSER is
188 * defined). (Note that this dependency is an artifact of the current
189 * kernel implementation and may change in future releases.)
190 */
191 #if (!defined(_STRICT_STDC) && !defined(__XOPEN_OR_POSIX)) || \
192     defined(_KERNEL) || defined(_KMEMUSER) || \
193     defined(__EXTENSIONS__)

```

```

194 #undef _LARGEFILE64_SOURCE
195 #define _LARGEFILE64_SOURCE 1
196 #endif
197 #if _LARGEFILE64_SOURCE - 0 == 1
198 #undef _LARGEFILE_SOURCE
199 #define _LARGEFILE_SOURCE 1
200 #endif

202 /*
203 * Large file compilation environment control:
204 *
205 * The setting of _FILE_OFFSET_BITS controls the size of various file-related
206 * types and governs the mapping between file-related source function symbol
207 * names and the corresponding binary entry points.
208 *
209 * In the 32-bit environment, the default value is 32; if not set, set it to
210 * the default here, to simplify tests in other headers.
211 *
212 * In the 64-bit compilation environment, the only value allowed is 64.
213 */
214 #if defined(_LP64)
215 #ifndef _FILE_OFFSET_BITS
216 #define _FILE_OFFSET_BITS 64
217 #endif
218 #if _FILE_OFFSET_BITS - 0 != 64
219 #error "invalid _FILE_OFFSET_BITS value specified"
220 #endif
221 #else /* _LP64 */
222 #ifndef _FILE_OFFSET_BITS
223 #define _FILE_OFFSET_BITS 32
224 #endif
225 #if _FILE_OFFSET_BITS - 0 != 32 && _FILE_OFFSET_BITS - 0 != 64
226 #error "invalid _FILE_OFFSET_BITS value specified"
227 #endif
228 #endif /* _LP64 */

230 /*
231 * Use of _XOPEN_SOURCE
232 *
233 * The following X/Open specifications are supported:
234 *
235 * X/Open Portability Guide, Issue 3 (XPG3)
236 * X/Open CAE Specification, Issue 4 (XPG4)
237 * X/Open CAE Specification, Issue 4, Version 2 (XPG4v2)
238 * X/Open CAE Specification, Issue 5 (XPG5)
239 * Open Group Technical Standard, Issue 6 (XPG6), also referred to as
240 * IEEE Std. 1003.1-2001 and ISO/IEC 9945:2002.
241 * Open Group Technical Standard, Issue 7 (XPG7), also referred to as
242 * IEEE Std. 1003.1-2008 and ISO/IEC 9945:2009.
243 *
244 * XPG4v2 is also referred to as UNIX 95 (SUS or SUSv1).
245 * XPG5 is also referred to as UNIX 98 or the Single Unix Specification,
246 * Version 2 (SUSv2)
247 * XPG6 is the result of a merge of the X/Open and POSIX specifications
248 * and as such is also referred to as IEEE Std. 1003.1-2001 in
249 * addition to UNIX 03 and SUSv3.
250 * XPG7 is also referred to as UNIX 08 and SUSv4.
251 *
252 * When writing a conforming X/Open application, as per the specification
253 * requirements, the appropriate feature test macros must be defined at
254 * compile time. These are as follows. For more info, see standards(5).
255 *
256 * Feature Test Macro Specification
257 * -----
258 * _XOPEN_SOURCE XPG3
259 * _XOPEN_SOURCE && _XOPEN_VERSION = 4 XPG4

```

```

260 * _XOPEN_SOURCE && _XOPEN_SOURCE_EXTENDED = 1          XPG4v2
261 * _XOPEN_SOURCE = 500                                   XPG5
262 * _XOPEN_SOURCE = 600 (or POSIX_C_SOURCE=200112L)      XPG6
263 * _XOPEN_SOURCE = 700 (or POSIX_C_SOURCE=200809L)      XPG7
264 *
265 * In order to simplify the guards within the headers, the following
266 * implementation private test macros have been created. Applications
267 * must NOT use these private test macros as unexpected results will
268 * occur.
269 *
270 * Note that in general, the use of these private macros is cumulative.
271 * For example, the use of _XPG3 with no other restrictions on the X/Open
272 * namespace will make the symbols visible for XPG3 through XPG6
273 * compilation environments. The use of _XPG4_2 with no other X/Open
274 * namespace restrictions indicates that the symbols were introduced in
275 * XPG4v2 and are therefore visible for XPG4v2 through XPG6 compilation
276 * environments, but not for XPG3 or XPG4 compilation environments.
277 *
278 * _XPG3      X/Open Portability Guide, Issue 3 (XPG3)
279 * _XPG4      X/Open CAE Specification, Issue 4 (XPG4)
280 * _XPG4_2    X/Open CAE Specification, Issue 4, Version 2 (XPG4v2/UNIX 95/SUS)
281 * _XPG5      X/Open CAE Specification, Issue 5 (XPG5/UNIX 98/SUSv2)
282 * _XPG6      Open Group Technical Standard, Issue 6 (XPG6/UNIX 03/SUSv3)
283 * _XPG7      Open Group Technical Standard, Issue 7 (XPG7/UNIX 08/SUSv4)
284 */
285
286 /* X/Open Portability Guide, Issue 3 */
287 #if defined(_XOPEN_SOURCE) && (_XOPEN_SOURCE - 0 < 500) && \
288     (_XOPEN_VERSION - 0 < 4) && !defined(_XOPEN_SOURCE_EXTENDED)
289 #define _XPG3
290 /* X/Open CAE Specification, Issue 4 */
291 #elif defined(_XOPEN_SOURCE) && _XOPEN_VERSION - 0 == 4)
292 #define _XPG4
293 #define _XPG3
294 /* X/Open CAE Specification, Issue 4, Version 2 */
295 #elif defined(_XOPEN_SOURCE) && _XOPEN_SOURCE_EXTENDED - 0 == 1)
296 #define _XPG4_2
297 #define _XPG4
298 #define _XPG3
299 /* X/Open CAE Specification, Issue 5 */
300 #elif (_XOPEN_SOURCE - 0 == 500)
301 #define _XPG5
302 #define _XPG4_2
303 #define _XPG4
304 #define _XPG3
305 #undef _POSIX_C_SOURCE
306 #define _POSIX_C_SOURCE 199506L
307 /* Open Group Technical Standard, Issue 6 */
308 #elif (_XOPEN_SOURCE - 0 == 600) || (_POSIX_C_SOURCE - 0 == 200112L)
309 #define _XPG6
310 #define _XPG5
311 #define _XPG4_2
312 #define _XPG4
313 #define _XPG3
314 #undef _POSIX_C_SOURCE
315 #define _POSIX_C_SOURCE 200112L
316 #undef _XOPEN_SOURCE
317 #define _XOPEN_SOURCE 600
318
319 /* Open Group Technical Standard, Issue 7 */
320 #elif (_XOPEN_SOURCE - 0 == 700) || (_POSIX_C_SOURCE - 0 == 200809L)
321 #define _XPG7
322 #define _XPG6
323 #define _XPG5
324 #define _XPG4_2
325 #define _XPG4

```

```

326 #define _XPG3
327 #undef _POSIX_C_SOURCE
328 #define _POSIX_C_SOURCE 200809L
329 #undef _XOPEN_SOURCE
330 #define _XOPEN_SOURCE 700
331 #endif
332
333 /*
334 * As another simplification attempt for the rest of our headers, we
335 * define the following macros to indicate that a specific XPG standard
336 * is in force, AND symbols should be restricted. This lets us prune
337 * symbols that should not be visible under a given standard. These should
338 * not be used by applications directly.
339 */
340 #if defined(_STRICT_SYMBOLS) && defined(_XPG3)
341 #define _STRICT_XPG3
342 #endif
343 #if defined(_STRICT_SYMBOLS) && defined(_XPG4)
344 #define _STRICT_XPG4
345 #endif
346 #if defined(_STRICT_SYMBOLS) && defined(_XPG4_2)
347 #define _STRICT_XPG4_2
348 #endif
349 #if defined(_STRICT_SYMBOLS) && defined(_XPG5)
350 #define _STRICT_XPG5
351 #endif
352 #if defined(_STRICT_SYMBOLS) && defined(_XPG6)
353 #define _STRICT_XPG6
354 #endif
355 #if defined(_STRICT_SYMBOLS) && defined(_XPG7)
356 #define _STRICT_XPG7
357 #endif
358
359 /*
360 * _XOPEN_VERSION is defined by the X/Open specifications and is not
361 * normally defined by the application, except in the case of an XPG4
362 * application. On the implementation side, _XOPEN_VERSION defined with
363 * the value of 3 indicates an XPG3 application. _XOPEN_VERSION defined
364 * with the value of 4 indicates an XPG4 or XPG4v2 (UNIX 95) application.
365 * _XOPEN_VERSION defined with a value of 500 indicates an XPG5 (UNIX 98)
366 * application and with a value of 600 indicates an XPG6 (UNIX 03)
367 * application and with a value of 700 indicates an XPG7 (UNIX 08).
368 * The appropriate version is determined by the use of the
369 * feature test macros described earlier. The value of _XOPEN_VERSION
370 * defaults to 3 otherwise indicating support for XPG3 applications.
371 */
372 #ifndef _XOPEN_VERSION
373 #if defined(_XPG7)
374 #define _XOPEN_VERSION 700
375 #elif defined(_XPG6)
376 #define _XOPEN_VERSION 600
377 #elif defined(_XPG5)
378 #define _XOPEN_VERSION 500
379 #elif defined(_XPG4_2)
380 #define _XOPEN_VERSION 4
381 #else
382 #define _XOPEN_VERSION 3
383 #endif
384 #endif
385
386 /*
387 * ANSI C and ISO 9899:1990 say the type long long doesn't exist in strictly
388 * conforming environments. ISO 9899:1999 says it does.
389 *
390 * The presence of _LONGLONG_TYPE says "long long exists" which is therefore
391 * defined in all but strictly conforming environments that disallow it.

```

```
392 */
393 #if !defined(_STDC_C99) && defined(_STRICT_STDC) && !defined(__GNUC__)
394 /*
395  * Resist attempts to force the definition of long long in this case.
396  */
397 #if defined(_LONGLONG_TYPE)
398 #error "No long long in strictly conforming ANSI C & 1990 ISO C environments"
399 #endif
400 #else
401 #if !defined(_LONGLONG_TYPE)
402 #define _LONGLONG_TYPE
403 #endif
404 #endif

406 /*
407  * It is invalid to compile an XPG3, XPG4, XPG4v2, or XPG5 application
408  * using c99. The same is true for POSIX.1-1990, POSIX.2-1992, POSIX.1b,
409  * and POSIX.1c applications. Likewise, it is invalid to compile an XPG6
410  * or a POSIX.1-2001 application with anything other than a c99 or later
411  * compiler. Therefore, we force an error in both cases.
412  */
413 #if defined(_STDC_C99) && (defined(__XOPEN_OR_POSIX) && !defined(_XPG6))
414 #error "Compiler or options invalid for pre-UNIX 03 X/Open applications \
415 and pre-2001 POSIX applications"
416 #elif !defined(_STDC_C99) && \
417 (defined(__XOPEN_OR_POSIX) && defined(_XPG6))
418 #error "Compiler or options invalid; UNIX 03 and POSIX.1-2001 applications \
419 require the use of c99"
420 #endif

422 /*
423  * The following macro defines a value for the ISO C99 restrict
424  * keyword so that _RESTRICT_KYWD resolves to "restrict" if
425  * an ISO C99 compiler is used and "" (null string) if any other
426  * compiler is used. This allows for the use of single prototype
427  * declarations regardless of compiler version.
428  */
429 #if (defined(_STDC_) && defined(_STDC_C99)) && !defined(__cplusplus)
430 #define _RESTRICT_KYWD restrict
431 #else
432 #define _RESTRICT_KYWD
433 #endif

435 /*
436  * The following macro indicates header support for the ANSI C++
437  * standard. The ISO/IEC designation for this is ISO/IEC FDIS 14882.
438  */
439 #define _ISO_CPP_14882_1998

441 /*
442  * The following macro indicates header support for the C99 standard,
443  * ISO/IEC 9899:1999, Programming Languages - C.
444  */
445 #define _ISO_C_9899_1999

447 /*
448  * The following macro indicates header support for DTrace. The value is an
449  * integer that corresponds to the major version number for DTrace.
450  */
451 #define _DTRACE_VERSION 1

453 #ifdef __cplusplus
454 }
455 #endif

457 #endif /* _SYS_FEATURE_TESTS_H */
```

new/usr/src/uts/common/sys/stat.h

1

```
*****
14219 Sun Jul 27 18:01:37 2014
new/usr/src/uts/common/sys/stat.h
Ensured various XPG7 stuff are declared properly in sys/stat.h (and cleanup)
New documentation for wcslen, wcsnlen, wcsasecmp (and friends), wcsdup.
Various other tweaks and markup improvements.
*****
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 */

22 /*
23  * Copyright (c) 1999, 2010, Oracle and/or its affiliates. All rights reserved.
24  * Copyright 2014 Garrett D'Amore <garrett@damore.org>
25  */

27 /*      Copyright (c) 1990, 1991 UNIX System Laboratories, Inc. */
28 /*      Copyright (c) 1984, 1986, 1987, 1988, 1989, 1990 AT&T */
29 /*      All Rights Reserved      */

31 #ifndef _SYS_STAT_H
32 #define _SYS_STAT_H

34 #include <sys/feature_tests.h>
35 #include <sys/types.h>

37 #ifdef __cplusplus
38 extern "C" {
39 #endif

41 /*
42  * The implementation specific header <sys/time_impl.h> includes a
43  * definition for timestruc_t needed by the stat structure. However,
44  * including either <time.h>, which includes <sys/time_impl.h>, or
45  * including <sys/time_impl.h> directly will break both X/Open and
46  * POSIX namespace. Preceding tag, structure, and structure member
47  * names with underscores eliminates the namespace breakage and at the
48  * same time, with unique type names, eliminates the possibility of
49  * timespec_t or timestruc_t naming conflicts that could otherwise
50  * result based on the order of inclusion of <sys/stat.h> and
51  * <sys/time.h>. The header <sys/time_std_impl.h> contains the
52  * standards namespace safe versions of these definitions.
53  */
54 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__)
55 #include <sys/time_impl.h>
56 #else
57 #include <sys/time_std_impl.h>
58 #endif /* !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) */
```

new/usr/src/uts/common/sys/stat.h

2

```
60 #define _ST_FSTYPSZ 16          /* array size for file system type name */

62 /*
63  * stat structure, used by stat(2) and fstat(2)
64  */

66 #if defined(_KERNEL)

68     /* Expanded stat structure */

70 #if defined(_LP64)

72 struct stat {
73     dev_t      st_dev;
74     ino_t      st_ino;
75     mode_t     st_mode;
76     nlink_t    st_nlink;
77     uid_t      st_uid;
78     gid_t      st_gid;
79     dev_t      st_rdev;
80     off_t      st_size;
81     timestruc_t st_atim;
82     timestruc_t st_mtim;
83     timestruc_t st_ctim;
84     blksize_t  st_blksize;
85     blkcnt_t   st_blocks;
86     char       st_fstype[_ST_FSTYPSZ];
87 };

    unchanged portion omitted_

395 #if _LONG_LONG_ALIGNMENT == 8 && _LONG_LONG_ALIGNMENT_32 == 4
396 #pragma pack()
397 #endif

399 #endif /* _SYSCALL32 */

401 /* MODE MASKS */

403 /* de facto standard definitions */

405 #define S_IFMT      0xF000 /* type of file */
406 #define S_IAMB      0x1FFF /* access mode bits */
407 #define S_IFIFO     0x1000 /* fifo */
408 #define S_IFCHR     0x2000 /* character special */
409 #define S_IFDIR     0x4000 /* directory */
410 /* XENIX definitions are not relevant to Solaris */
411 #define S_IFNAM     0x5000 /* XENIX special named file */
412 #define S_INSEM     0x1    /* XENIX semaphore subtype of IFNAM */
413 #define S_INSHD     0x2    /* XENIX shared data subtype of IFNAM */
414 #define S_IFBLK     0x6000 /* block special */
415 #define S_IFREG     0x8000 /* regular */
416 #define S_IFLNK     0xA000 /* symbolic link */
417 #define S_IFSOCK    0xC000 /* socket */
418 #define S_IFDOOR    0xD000 /* door */
419 #define S_IFPORT    0xE000 /* event port */
420 #define S_ISUID     0x800 /* set user id on execution */
421 #define S_ISGID     0x400 /* set group id on execution */
422 #define S_ISVTX     0x200 /* save swapped text even after use */
423 #define S_IREAD     00400 /* read permission, owner */
424 #define S_IWRITE    00200 /* write permission, owner */
425 #define S_IXEXEC    00100 /* execute/search permission, owner */
426 #define S_ENFMT     S_ISGID /* record locking enforcement flag */

428 /* the following macros are for POSIX conformance */

430 #define S_IRWXU      00700 /* read, write, execute: owner */
```

```

431 #define S_IRUSR      00400 /* read permission: owner */
432 #define S_IWUSR      00200 /* write permission: owner */
433 #define S_IXUSR      00100 /* execute permission: owner */
434 #define S_IRWXG      00070 /* read, write, execute: group */
435 #define S_IRGRP      00040 /* read permission: group */
436 #define S_IWGRP      00020 /* write permission: group */
437 #define S_IXGRP      00010 /* execute permission: group */
438 #define S_IRWXO      00007 /* read, write, execute: other */
439 #define S_IROTH      00004 /* read permission: other */
440 #define S_IWOTH      00002 /* write permission: other */
441 #define S_IXOTH      00001 /* execute permission: other */

444 #define S_ISFIFO(mode) (((mode)&0xF000) == 0x1000)
445 #define S_ISCHR(mode)  (((mode)&0xF000) == 0x2000)
446 #define S_ISDIR(mode)  (((mode)&0xF000) == 0x4000)
447 #define S_ISBLK(mode)  (((mode)&0xF000) == 0x6000)
448 #define S_ISREG(mode)  (((mode)&0xF000) == 0x8000)
449 #define S_ISLNK(mode)  (((mode)&0xF000) == 0xa000)
450 #define S_ISSOCK(mode) (((mode)&0xF000) == 0xc000)
451 #define S_ISDOOR(mode) (((mode)&0xF000) == 0xd000)
452 #define S_ISPORT(mode) (((mode)&0xF000) == 0xe000)

454 /* POSIX.4 macros */
455 #define S_TYPEISMQ(_buf)      (0)
456 #define S_TYPEISSEM(_buf)     (0)
457 #define S_TYPEISSHM(_buf)     (0)

459 #if defined(__i386) || (defined(__i386_COMPAT) && defined(_KERNEL))

461 /*
462  * A version number is included in the x86 SVR4 stat and mknod interfaces
463  * so that SVR4 binaries can be supported. An LP64 kernel that supports
464  * the i386 ABI need to be aware of this too.
465  */

467 #define _R3_MKNOD_VER 1 /* SVR3.0 mknod */
468 #define _MKNOD_VER 2 /* current version of mknod */
469 #define _R3_STAT_VER 1 /* SVR3.0 stat */
470 #define _STAT_VER 2 /* current version of stat */

472 #endif /* __i386 || (__i386_COMPAT && _KERNEL) */

473 #if defined(__EXTENSIONS__) || \
474     (!defined(_STRICT_STDC) && !defined(__XOPEN_OR_POSIX))
475     /* || defined(_XPG7) */
476 /* for use with futimens() and utimensat() */
477 #define _UTIME_NOW -1L
478 #define _UTIME_OMIT -2L
479 #endif /* defined(__EXTENSIONS__) ... */

474 #if !defined(_KERNEL) || defined(_BOOT)

483 #if defined(__STDC__)

476 #if !defined(__XOPEN_OR_POSIX) || (_POSIX_C_SOURCE > 2) || \
477     defined(_XPG4_2) || defined(__EXTENSIONS__)
478 extern int fchmod(int, mode_t);
479 #endif /* !defined(__XOPEN_OR_POSIX) || (_POSIX_C_SOURCE > 2)... */

481 extern int chmod(const char *, mode_t);
482 extern int mkdir(const char *, mode_t);
483 extern int mkfifo(const char *, mode_t);
484 extern mode_t umask(mode_t);

486 /* transitional large file interfaces */

```

```

487 #if defined(_LARGEFILE64_SOURCE) && !((_FILE_OFFSET_BITS == 64) && \
488     !defined(__PRAGMA_REDEFINE_EXTNAME))
489 extern int fstat64(int, struct stat64 *);
490 extern int stat64(const char * _RESTRICT_KYWD, struct stat64 * _RESTRICT_KYWD);
491 extern int lstat64(const char * _RESTRICT_KYWD, struct stat64 * _RESTRICT_KYWD);
492 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) || \
493     defined(_ATFILE_SOURCE)
494 extern int fstatat64(int, const char *, struct stat64 *, int);
495 #endif /* defined(_ATFILE_SOURCE) */
496 #endif

498 #if defined(_XPG7) || defined(_ATFILE_SOURCE)
499 #if defined(__EXTENSIONS__) || defined(_ATFILE_SOURCE) || \
500     (!defined(_STRICT_STDC) && !defined(__XOPEN_OR_POSIX))
501     /* || defined(_XPG7) */
502 extern int mkdirat(int, const char *, mode_t);
503 extern int mkfifoat(int, const char *, mode_t);
504 extern int mknodat(int, const char *, mode_t, dev_t);
505 extern int fchmodat(int, const char *, mode_t, int);
506 #endif

508 #if defined(_XPG7) || !defined(_STRICT_SYMBOLS)
509 #define _UTIME_NOW -1L
510 #define _UTIME_OMIT -2L
511 extern int futimens(int, const struct timespec[2]);
512 extern int utimensat(int, const char *, const struct timespec[2], int);
513 #endif /* defined(__EXTENSIONS__) ... */

515 #else /* !_STDC */

520 #if !defined(__XOPEN_OR_POSIX) || (_POSIX_C_SOURCE > 2) || \
521     defined(_XPG4_2) || defined(__EXTENSIONS__)
522 extern int fchmod();
523 #endif /* !defined(__XOPEN_OR_POSIX) || (_POSIX_C_SOURCE > 2)... */

525 extern int chmod();
526 extern int mkdir();
527 extern int mkfifo();
528 extern mode_t umask();

530 /* transitional large file interfaces */
531 #if defined(_LARGEFILE64_SOURCE) && !((_FILE_OFFSET_BITS == 64) && \
532     !defined(__PRAGMA_REDEFINE_EXTNAME))
533 extern int fstat64();
534 extern int stat64();
535 extern int lstat64();
536 #if !defined(__XOPEN_OR_POSIX) || defined(__EXTENSIONS__) || \
537     defined(_ATFILE_SOURCE)
538 extern int fstatat64();
539 #endif /* defined(_ATFILE_SOURCE) */
540 #endif

542 #if defined(__EXTENSIONS__) || defined(_ATFILE_SOURCE) || \
543     (!defined(_STRICT_STDC) && !defined(__XOPEN_OR_POSIX))
544     /* || defined(_XPG7) */
545 extern int mkdirat();
546 extern int mkfifoat();
547 extern int mknodat();
548 extern int fchmodat();
549 extern int futimens();
550 extern int utimensat();
551 #endif /* defined(__EXTENSIONS__) ... */

553 #endif /* defined(__STDC__) */

512 #include <sys/stat_impl.h>

```

new/usr/src/uts/common/sys/stat.h

5

```
514 #endif /* !defined(__KERNEL) */
```

```
516 #ifdef __cplusplus
```

```
517 }
```

```
_____unchanged_portion_omitted_
```

new/usr/src/uts/common/sys/timeb.h

1

```
*****
3161 Sun Jul 27 18:01:37 2014
new/usr/src/uts/common/sys/timeb.h
first round of POSIX 2008 stuff
*****
1 /*
2  * Copyright 2005 Sun Microsystems, Inc. All rights reserved.
3  * Use is subject to license terms.
4  */

6 /*
7  * Copyright 2014 Garrett D'Amore <garrett@damore.org>
8  */

10 #ifndef _SYS_TIMEB_H
11 #define _SYS_TIMEB_H

9 #pragma ident "%Z%M% %I% %E% SMI"

13 #ifdef __cplusplus
14 extern "C" {
15 #endif

17 #include <sys/types.h>
18 #include <sys/feature_tests.h>

20 /*
21  * Copyright (c) 1991, 1993
22  * The Regents of the University of California. All rights reserved.
23  * (c) UNIX System Laboratories, Inc.
24  * All or some portions of this file are derived from material licensed
25  * to the University of California by American Telephone and Telegraph
26  * Co. or Unix System Laboratories, Inc. and are reproduced herein with
27  * the permission of UNIX System Laboratories, Inc.
28  *
29  * Redistribution and use in source and binary forms, with or without
30  * modification, are permitted provided that the following conditions
31  * are met:
32  * 1. Redistributions of source code must retain the above copyright
33  * notice, this list of conditions and the following disclaimer.
34  * 2. Redistributions in binary form must reproduce the above copyright
35  * notice, this list of conditions and the following disclaimer in the
36  * documentation and/or other materials provided with the distribution.
37  * 3. All advertising materials mentioning features or use of this software
38  * must display the following acknowledgement:
39  * This product includes software developed by the University of
40  * California, Berkeley and its contributors.
41  * 4. Neither the name of the University nor the names of its contributors
42  * may be used to endorse or promote products derived from this software
43  * without specific prior written permission.
44  *
45  * THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND
46  * ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
47  * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
48  * ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE
49  * FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
50  * DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
51  * OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
52  * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
53  * LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
54  * OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
55  * SUCH DAMAGE.
56  */
```

59 /*

new/usr/src/uts/common/sys/timeb.h

2

```
60 * NOTE: This lives in sys/timeb.h due to standards requirements.
61 * The actual function is not a system call, but a libc function. Hence
62 * this header should never be included into kernel modules. Presumably
63 * the header shouldn't be included unless ftime() is desired, since it
64 * defines nothing else, but be pedantic.
65 */

67 #if (!defined(_STRICT_SYMBOLS)) || (defined(_XPG4_2) && !defined(_XPG7))
55 /* The ftime(2) system call structure */
68 struct timeb {
69     time_t time; /* seconds since the Epoch */
70     unsigned short millitm; /* + milliseconds since the Epoch */
71     short timezone; /* minutes west of CUT */
72     short dstflag; /* DST == non-zero */
73 };

63 #if defined(__STDC__)
75 extern int ftime(struct timeb *);
65 #else
66 extern int ftime();
76 #endif

78 #ifdef __cplusplus
79 }
    unchanged_portion_omitted
```