

errno-symbol-ubuntu18.04.4_LTS-2-sort.txt -- error message (By system)

Comment (/ ** /) part of <errno.h>

errno(3) release 4.15

(By ubuntu18.04.4 LTS)

error name	errno : Error-Message Start	errno Error-Message Start	(==:same, --:undefined)
	000 : Success	000	
E2BIG	007 : Argument list too long	007 Argument list too long	= Argument list too long (POSIX.1-2001).
EACCES	013 : Permission denied	013 Permission denied	= Permission denied (POSIX.1-2001).
EADDRINUSE	098 : Address already in use	098 Address already in use	= Address already in use (POSIX.1-2001).
EADDRNOTAVAIL	099 : Cannot assign requested address	099 Cannot assign requested address	Address not available (POSIX.1-2001).
EADV	068 : Advertise error	068 Advertise error	--
EAFNOSUPPORT	097 : Address family not supported by protocol	097 Address family not supported by protocol	Address family not supported (POSIX.1-2001).
EAGAIN	011 : Resource temporarily unavailable	011 Try again	Resource temporarily unavailable (POSIX.1-2001).
EALREADY	114 : Operation already in progress	114 Operation already in progress	Connection already in progress (POSIX.1-2001).
EBADF	052 : Invalid exchange	052 Invalid exchange	= Invalid exchange.
EBADFD	009 : Bad file descriptor	009 Bad file number	Bad file descriptor (POSIX.1-2001).
EBADMSG	077 : File descriptor in bad state	077 File descriptor in bad state	= File descriptor in bad state.
EBADR	074 : Bad message	074 Not a data message	Bad message (POSIX.1-2001).
EBADRQC	053 : Invalid request descriptor	053 Invalid request descriptor	= Invalid request descriptor.
EBADSLT	056 : Invalid request code	056 Invalid request code	= Invalid request code.
EBFONT	057 : Invalid slot	057 Invalid slot	= Invalid slot.
EBUSY	059 : Bad font file format	059 Bad font file format	--
ECANCELED	016 : Device or resource busy	016 Device or resource busy	= Device or resource busy (POSIX.1-2001).
ECHILD	125 : Operation canceled	125 Operation Canceled	= Operation canceled (POSIX.1-2001).
ECHRNG	010 : No child processes	010 No child processes	= No child processes (POSIX.1-2001).
ECOMM	044 : Channel number out of range	044 Channel number out of range	= Channel number out of range.
ECONNABORTED	070 : Communication error on send	070 Communication error on send	= Communication error on send.
ECONNREFUSED	103 : Software caused connection abort	103 Software caused connection abort	Connection aborted (POSIX.1-2001).
ECONNRESET	111 : Connection refused	111 Connection refused	= Connection refused (POSIX.1-2001).
EDEADLK	104 : Connection reset by peer	104 Connection reset by peer	Connection reset (POSIX.1-2001).
EDEADLOCK	035 : Resource deadlock avoided	035 Resource deadlock would occur	Resource deadlock avoided (POSIX.1-2001).
EDESTADDRREQ	058 : Unknown error 58	058 EDEADLOCK EDEADLK:35	Synonym for EDEADLK.
EDOM	089 : Destination address required	089 Destination address required	= Destination address required (POSIX.1-2001).
EDOTDOT	033 : Numerical argument out of domain	033 Math argument out of domain of func	Mathematics argument out of domain of function (POSIX.1, C99).
EDQUOT	073 : RFS specific error	073 RFS specific error	--
EEXIST	122 : Disk quota exceeded	122 Quota exceeded	Disk quota exceeded (POSIX.1-2001).
EFAULT	017 : File exists	017 File exists	= File exists (POSIX.1-2001).
EFBIG	014 : Bad address	014 Bad address	= Bad address (POSIX.1-2001).
EHOSTDOWN	027 : File too large	027 File too large	= File too large (POSIX.1-2001).
EHOSTUNREACH	112 : Host is down	112 Host is down	= Host is down.
EHWPOISON	113 : No route to host	113 No route to host	Host is unreachable (POSIX.1-2001).
EIDRM	133 : Memory page has hardware error	133 Memory page has hardware error	= Memory page has hardware error.
EILSEQ	043 : Identifier removed	043 Identifier removed	= Identifier removed (POSIX.1-2001).
EINPROGRESS	084 : Invalid or incomplete multibyte or wide character	084 Illegal byte sequence	Invalid or incomplete multibyte or wide character (POSIX.1, C99).
EINTR	115 : Operation now in progress	115 Operation now in progress	Operation in progress (POSIX.1-2001).
EINVAL	004 : Interrupted system call	004 Interrupted system call	Interrupted function call (POSIX.1-2001);
EIO	022 : Invalid argument	022 Invalid argument	= Invalid argument (POSIX.1-2001).
EISCONN	005 : Input/output error	005 I/O error	= Input/output error (POSIX.1-2001).
EISDIR	106 : Transport endpoint is already connected	106 Transport endpoint is already connected	Socket is connected (POSIX.1-2001).
EISNAM	021 : Is a directory	021 Is a directory	= Is a directory (POSIX.1-2001).
EKEYEXPIRED	120 : Is a named type file	120 Is a named type file	= Is a named type file.
EKEYREJECTED	127 : Key has expired	127 Key has expired	= Key has expired.
EKEYREVOKED	129 : Key was rejected by service	129 Key was rejected by service	= Key was rejected by service.
EL2HLT	128 : Key has been revoked	128 Key has been revoked	= Key has been revoked.
EL2NSYNC	051 : Level 2 halted	051 Level 2 halted	= Level 2 halted.
EL3HLT	045 : Level 2 not synchronized	045 Level 2 not synchronized	= Level 2 not synchronized.
EL3RST	046 : Level 3 halted	046 Level 3 halted	= Level 3 halted.
ELIBACC	047 : Level 3 reset	047 Level 3 reset	= Level 3 reset.
ELIBBAD	079 : Can not access a needed shared library	079 Can not access a needed shared library	= Cannot access a needed shared library.
ELIBEXEC	080 : Accessing a corrupted shared library	080 Accessing a corrupted shared library	= Accessing a corrupted shared library.
ELIBMAX	083 : Cannot exec a shared library directly	083 Cannot exec a shared library directly	= Cannot exec a shared library directly.
ELIBSCN	082 : Attempting to link in too many shared libraries	082 Attempting to link in too many shared libraries	= Attempting to link in too many shared libraries.
ELNRNG	081 : .lib section in a.out corrupted	081 .lib section in a.out corrupted	= .lib section in a.out corrupted
ELOOP	048 : Link number out of range	048 Link number out of range	= Link number out of range.
EMEDIUMTYPE	040 : Too many levels of symbolic links	040 Too many symbolic links encountered	Too many levels of symbolic links (POSIX.1-2001).
EMFILE	124 : Wrong medium type	124 Wrong medium type	= Wrong medium type.
EMLINK	024 : Too many open files	024 Too many open files	= Too many open files (POSIX.1-2001).
EMSGSIZE	031 : Too many links	031 Too many links	= Too many links (POSIX.1-2001).
EMULTIHOP	090 : Message too long	090 Message too long	= Message too long (POSIX.1-2001).
ENAMETOOLONG	072 : Multihop attempted	072 Multihop attempted	= Multihop attempted (POSIX.1-2001).
ENAVAIL	036 : File name too long	036 File name too long	= Filename too long (POSIX.1-2001).
ENETDOWN	119 : No XENIX semaphores available	119 No XENIX semaphores available	--
ENETRESET	100 : Network is down	100 Network is down	= Network is down (POSIX.1-2001).
ENETUNREACH	102 : Network dropped connection on reset	102 Network dropped connection because of reset	Connection aborted by network (POSIX.1-2001).
ENFILE	101 : Network is unreachable	101 Network is unreachable	= Network unreachable (POSIX.1-2001).
ENOANO	023 : Too many open files in system	023 File table overflow	Too many open files in system (POSIX.1-2001).
ENOBUFS	055 : No anode	055 No anode	= No anode.
ENOCSI	105 : No buffer space available	105 No buffer space available	= No buffer space available (POSIX.1 (XSI STREAMS option)).
ENODATA	050 : No CSI structure available	050 No CSI structure available	--
ENODEV	061 : No data available	061 No data available	No message is available on the STREAM head read queue (POSIX.1-2001).
ENOENT	019 : No such device	019 No such device	= No such device (POSIX.1-2001).
ENOEXEC	002 : No such file or directory	002 No such file or directory	= No such file or directory (POSIX.1-2001).
ENOKEY	008 : Exec format error	008 Exec format error	= Exec format error (POSIX.1-2001).
ENOLCK	126 : Required key not available	126 Required key not available	= Required key not available.
ENOLINK	037 : No locks available	037 No record locks available	No locks available (POSIX.1-2001).
ENOMEDIUM	067 : Link has been severed	067 Link has been severed	= Link has been severed (POSIX.1-2001).
ENOMEM	123 : No medium found	123 No medium found	= No medium found.
ENOMSG	012 : Cannot allocate memory	012 Out of memory	Not enough space/cannot allocate memory (POSIX.1-2001).
ENONET	042 : No message of desired type	042 No message of desired type	= No message of the desired type (POSIX.1-2001).
ENOPKG	064 : Machine is not on the network	064 Machine is not on the network	= Machine is not on the network.
ENOPROTOPT	065 : Package not installed	065 Package not installed	= Package not installed.
ENOSPC	092 : Protocol not available	092 Protocol not available	= Protocol not available (POSIX.1-2001).
ENOSR	028 : No space left on device	028 No space left on device	= No space left on device (POSIX.1-2001).
ENOSTR	063 : Out of streams resources	063 Out of streams resources	No STREAM resources (POSIX.1 (XSI STREAMS option)).
	060 : Device not a stream	060 Device not a stream	Not a STREAM (POSIX.1 (XSI STREAMS option)).

ENOSYS	038 : Function not implemented
ENOTBLK	015 : Block device required
ENOTCONN	107 : Transport endpoint is not connected
ENOTDIR	020 : Not a directory
ENOTEMPTY	039 : Directory not empty
ENOTNAM	118 : Not a XENIX named type file
ENOTRECOVERABLE	131 : State not recoverable
ENOTSOCK	088 : Socket operation on non-socket
ENOTTY	025 : Inappropriate ioctl for device
ENOTUNIQ	076 : Name not unique on network
ENXIO	006 : No such device or address
EOPNOTSUPP	095 : Operation not supported
Eoverflow	075 : Value too large for defined data type
EOWNERDEAD	130 : Owner died
EPERM	001 : Operation not permitted
EPFNOSUPPORT	096 : Protocol family not supported
EPIPE	032 : Broken pipe
EPROTO	071 : Protocol error
EPROTONOSUPPORT	093 : Protocol not supported
EPROTOTYPE	091 : Protocol wrong type for socket
ERANGE	034 : Numerical result out of range
EREMCHG	078 : Remote address changed
EREMOTE	066 : Object is remote
EREMOTEIO	121 : Remote I/O error
ERESTART	085 : Interrupted system call should be restarted
ERFKILL	132 : Operation not possible due to RF-kill
EROFS	030 : Read-only file system
ESHUTDOWN	108 : Cannot send after transport endpoint shutdown
ESOCKTNOSUPPORT	094 : Socket type not supported
ESPIPE	029 : Illegal seek
ESRCH	003 : No such process
ESRMNT	069 : Srmount error
ESTALE	116 : Stale file handle
ESTRPIPE	086 : Streams pipe error
ETIME	062 : Timer expired
ETIMEDOUT	110 : Connection timed out
ETOOMANYREFS	109 : Too many references: cannot splice
ETXTBSY	026 : Text file busy
EUCLEAN	117 : Structure needs cleaning
EUNATCH	049 : Protocol driver not attached
EUSERS	087 : Too many users
EWouldBlock	041 : Unknown error 41
EXDEV	018 : Invalid cross-device link
EXFULL	054 : Exchange full

038 Invalid system call number	Function not implemented (POSIX.1-2001).
015 Block device required	= Block device required.
107 Transport endpoint is not connected	The socket is not connected (POSIX.1-2001).
020 Not a directory	= Not a directory (POSIX.1-2001).
039 Directory not empty	= Directory not empty (POSIX.1-2001).
118 Not a XENIX named type file	--
131 State not recoverable	= State not recoverable (POSIX.1-2008).
088 Socket operation on non-socket	Not a socket (POSIX.1-2001).
025 Not a typewriter	Inappropriate I/O control operation (POSIX.1-2001).
076 Name not unique on network	= Name not unique on network.
006 No such device or address	= No such device or address (POSIX.1-2001)
095 Operation not supported on transport endpoint	Operation not supported on socket (POSIX.1-2001).
075 Value too large for defined data type	Value too large to be stored in data type (POSIX.1-2001).
130 Owner died	= Owner died (POSIX.1-2008).
001 Operation not permitted	= Operation not permitted (POSIX.1-2001).
096 Protocol family not supported	= Protocol family not supported.
032 Broken pipe	= Broken pipe (POSIX.1-2001).
071 Protocol error	= Protocol error (POSIX.1-2001).
093 Protocol not supported	= Protocol not supported (POSIX.1-2001).
091 Protocol wrong type for socket	= Protocol wrong type for socket (POSIX.1-2001).
034 Math result not representable	Result too large (POSIX.1, C99).
078 Remote address changed	= Remote address changed.
066 Object is remote	= Object is remote.
121 Remote I/O error	= Remote I/O error.
085 Interrupted system call should be restarted	= Interrupted system call should be restarted.
132 Operation not possible due to RF-kill	= Operation not possible due to RF-kill.
030 Read-only file system	= Read-only filesystem (POSIX.1-2001).
108 Cannot send after transport endpoint shutdown	= Cannot send after transport endpoint shutdown.
094 Socket type not supported	= Socket type not supported.
029 Illegal seek	Invalid seek (POSIX.1-2001).
003 No such process	= No such process (POSIX.1-2001).
069 Srmount error	--
116 Stale file handle	= Stale file handle (POSIX.1-2001).
086 Streams pipe error	= Streams pipe error.
062 Timer expired	= Timer expired (POSIX.1 (XSI STREAMS option)).
110 Connection timed out	= Connection timed out (POSIX.1-2001).
109 Too many references: cannot splice	= Too many references: cannot splice.
026 Text file busy	= Text file busy (POSIX.1-2001).
117 Structure needs cleaning	= Structure needs cleaning.
049 Protocol driver not attached	= Protocol driver not attached.
087 Too many users	= Too many users.
041 Operation would block	= Operation would block (may be same value as EAGAIN) 11 (POSIX.1-2001).
018 Cross-device link	Improper link (POSIX.1-2001).
054 Exchange full	= Exchange full.

error name	errno : Error-Message	End
ENOTSUP	-- On Linux it is the same value (95) as "EOPNOTSUPP"	

errno : Error-Message	End	(==:same, --:undefined)
-- --		Operation not supported (POSIX.1-2001).

errno-name ubuntu18.04.4 LTS system -- error message (By system)

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~$ ~/bin/version-s (My environment)
Description: Ubuntu 18.04.4 LTS Created February 20, 2020
Linux 4.15.0-76-generic x86_64 GNU/Linux
gcc (Ubuntu 7.4.0-1ubuntu1~18.04.1) 7.4.0
GNU C Library (Ubuntu GLIBC 2.27-3ubuntu1) stable release version 2.27.
```

The "error name", "errno number", and "error message" in this column are output forcibly by the program. It is the result of executing "sort".
 ~ /test-program/FD-error-test/test-errno-symbol-2.c
 (It's a dirty program with super beginners!)

The left message in the right column is from the above ubuntu 18.04.3 LTS (at this point)
 Excerpt from /usr/include/asm-generic/errno-base.h. (From 1 to 34)
 Excerpt from /usr/include/asm-generic/errno.h. (Up to 35-133)
 Referenced.

The right message in the right column is from the "terminal" of the above ubuntu 18.04.4 LTS
 Output from "man 3 errno", "man errno.3", "info errno", "info errno.3".
 Linux Programmer's Manual ERRNO(3)
 This page is part of release 4.15 of the Linux man-pages project.
 02-02- 2018 ERRNO(3)

The magenta message in the above list is the difference.

Comment (/ ** /) part of <errno.h> **errno(3) release 4.15 (By ubuntu18.04.4 LTS)**

footnote	errno(3) release 4.15 (By ubuntu18.04.4 LTS)
EAGAIN	Resource temporarily unavailable (may be the same value as EWouldBlock)(POSIX.1-2001). -- (May be the same value as "EWouldBlock")
EILSEQ	084 Illegal byte sequence Invalid or incomplete multibyte or wide character (POSIX.1, C99). -- The text shown here is the glibc error description; in POSIX.1, this error is described as "Illegal byte sequence".
EMFILE	Too many open files (POSIX.1-2001). -- Commonly caused by exceeding the RLIMIT_NOFILE resource limit described in getrlimit(2).
ENFILE	Too many open files in system (POSIX.1-2001). -- On Linux, this is probably a result of encountering the /proc/sys/fs/file-max limit (see proc(5)).
ENOENT	No such file or directory (POSIX.1-2001). -- Typically, this error results when a specified pathname does not exist, or one of the components in the directory prefix of a pathname does not exist, or the specified pathname is a dangling symbolic link.
ENOTSUP and EOPNOTSUPP	have the same value on Linux, but according to POSIX.1 these error values should be distinct.
ESTALE	116 Stale file handle Stale file handle (POSIX.1-2001). -- This error can occur for NFS and for other filesystems.
ETIME	Timer expired (POSIX.1 (XSI STREAMS option)). -- (POSIX.1 says "STREAM ioctl(2) timeout".)

EOPNOTSUPP Operation not supported on socket (POSIX.1-2001).

(ENOTSUP and EOPNOTSUPP have the same value on Linux, but according to POSIX.1 these error values should be distinct.) -- See below

See <https://pubs.opengroup.org/onlinepubs/9699919799/basedefs/errno.h.html>
 Open Group Base Specifications Issue7, 2018 edition
 IEEE Std 1003.1-2017 (Revision of IEEE Std 1003.1-2008)
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Issue 7
 Austin Group Interpretation 1003.1-2001 #050 is applied, allowing [ENOTSUP] and [EOPNOTSUPP] to be the same values.