errno.h – C Error Codes in Linux

All the Linux/C error codes are listed below.

I occasionally google C error codes, but always end up grepping through /usr/include to find the answer. To save myself, and a few others, some time in the future...

/usr/include/asm-generic/errno-base.h

```
#ifndef _ASM_GENERIC_ERRNO_BASE_H
#define _ASM_GENERIC_ERRNO_BASE_H

#define EPERM            1  /* Operation not permitted */
#define ENOENT           2  /* No such file or directory */
#define ESRCH            3  /* No such process */
#define EINTR            4  /* Interrupted system call */
#define EIO        5  /* I/O error */
#define ENXIO            6  /* No such device or address */
#define E2BIG            7  /* Argument list too long */
#define ENOEXEC          8  /* Exec format error */
#define EBADF            9  /* Bad file number */
#define ECHILD          10  /* No child processes */
#define EAGAIN          11  /* Try again */
#define ENOMEM          12  /* Out of memory */
#define EACCES          13  /* Permission denied */
#define EFAULT          14  /* Bad address */
#define ENOTBLK         15  /* Block device required */
#define EBUSY           16  /* Device or resource busy */
#define EEXIST          17  /* File exists */
#define EXDEV           18  /* Cross-device link */
#define ENODEV          19  /* No such device */
#define ENOTDIR         20  /* Not a directory */
#define EISDIR          21  /* Is a directory */
#define EINVAL          22  /* Invalid argument */
#define ENFILE          23  /* File table overflow */
#define EMFILE          24  /* Too many open files */
#define ENOTTY          25  /* Not a typewriter */
#define ETXTBSY         26  /* Text file busy */
#define EFBIG           27  /* File too large */
#define ENOSPC          28  /* No space left on device */
#define ESPIPE          29  /* Illegal seek */
#define EROFS           30  /* Read-only file system */
#define EMLINK          31  /* Too many links */
#define EPIPE           32  /* Broken pipe */
#define EDOM            33  /* Math argument out of domain of func */
#define ERANGE          34  /* Math result not representable */

#endif
```

/usr/include/asm-generic/errno.h

```
#ifndef _ASM_GENERIC_ERRNO_H
#define _ASM_GENERIC_ERRNO_H
```

```c
#include <asm-generic/errno-base.h>

#define EDEADLK      35  /* Resource deadlock would occur */
#define ENAMETOOLONG  36  /* File name too long */
#define ENOLCK       37  /* No record locks available */
#define ENOSYS       38  /* Function not implemented */
#define ENOTEMPTY    39  /* Directory not empty */
#define ELOOP        40  /* Too many symbolic links encountered */
#define EWOULDBLOCK EAGAIN  /* Operation would block */
#define ENOMSG       42  /* No message of desired type */
#define EIDRM        43  /* Identifier removed */
#define ECHRNG       44  /* Channel number out of range */
#define EL2NSYNC     45  /* Level 2 not synchronized */
#define EL3HLT       46  /* Level 3 halted */
#define EL3RST       47  /* Level 3 reset */
#define ELNRNG       48  /* Link number out of range */
#define EUNATCH      49  /* Protocol driver not attached */
#define ENOCSI       50  /* No CSI structure available */
#define EL2HLT       51  /* Level 2 halted */
#define EBADE        52  /* Invalid exchange */
#define EBADR        53  /* Invalid request descriptor */
#define EXFULL       54  /* Exchange full */
#define ENOANO       55  /* No anode */
#define EBADRQC      56  /* Invalid request code */
#define EBADSLT      57  /* Invalid slot */


#define EDEADLOCK    EDEADLK

#define EBFONT       59  /* Bad font file format */
#define ENOSTR       60  /* Device not a stream */
#define ENODATA      61  /* No data available */
#define ETIME        62  /* Timer expired */
#define ENOSR        63  /* Out of streams resources */
#define ENONET       64  /* Machine is not on the network */
#define ENOPKG       65  /* Package not installed */
#define EREMOTE      66  /* Object is remote */
#define ENOLINK      67  /* Link has been severed */
#define EADV         68  /* Advertise error */
#define ESRMNT       69  /* Srmount error */
#define ECOMM        70  /* Communication error on send */
#define EPROTO       71  /* Protocol error */
#define EMULTIHOP    72  /* Multihop attempted */
#define EDOTDOT      73  /* RFS specific error */
#define EBADMSG      74  /* Not a data message */
```

```
#define EOVERFLOW     75  /* Value too large for defined data type */
#define ENOTUNIQ      76  /* Name not unique on network */
#define EBADFD        77  /* File descriptor in bad state */
#define EREMCHG       78  /* Remote address changed */
#define ELIBACC       79  /* Can not access a needed shared library */
#define ELIBBAD       80  /* Accessing a corrupted shared library */
#define ELIBSCN       81  /* .lib section in a.out corrupted */
#define ELIBMAX       82  /* Attempting to link in too many shared libraries
*/
#define ELIBEXEC      83  /* Cannot exec a shared library directly */
#define EILSEQ        84  /* Illegal byte sequence */
#define ERESTART      85  /* Interrupted system call should be restarted */
#define ESTRPIPE      86  /* Streams pipe error */
#define EUSERS        87  /* Too many users */
#define ENOTSOCK      88  /* Socket operation on non-socket */
#define EDESTADDRREQ     89  /* Destination address required */
#define EMSGSIZE      90  /* Message too long */
#define EPROTOTYPE    91  /* Protocol wrong type for socket */
#define ENOPROTOOPT   92  /* Protocol not available */
#define EPROTONOSUPPORT 93  /* Protocol not supported */
#define ESOCKTNOSUPPORT 94  /* Socket type not supported */
#define EOPNOTSUPP    95  /* Operation not supported on transport endpoint */
#define EPFNOSUPPORT     96  /* Protocol family not supported */
#define EAFNOSUPPORT     97  /* Address family not supported by protocol */
#define EADDRINUSE    98  /* Address already in use */
#define EADDRNOTAVAIL    99  /* Cannot assign requested address */
#define ENETDOWN      100 /* Network is down */
#define ENETUNREACH   101 /* Network is unreachable */
#define ENETRESET     102 /* Network dropped connection because of reset */
#define ECONNABORTED     103 /* Software caused connection abort */
#define ECONNRESET    104 /* Connection reset by peer */
#define ENOBUFS       105 /* No buffer space available */
#define EISCONN       106 /* Transport endpoint is already connected */
#define ENOTCONN      107 /* Transport endpoint is not connected */
#define ESHUTDOWN     108 /* Cannot send after transport endpoint shutdown */
#define ETOOMANYREFS     109 /* Too many references: cannot splice */
#define ETIMEDOUT     110 /* Connection timed out */
#define ECONNREFUSED     111 /* Connection refused */
#define EHOSTDOWN     112 /* Host is down */
#define EHOSTUNREACH     113 /* No route to host */
#define EALREADY      114 /* Operation already in progress */
#define EINPROGRESS   115 /* Operation now in progress */
#define ESTALE        116 /* Stale NFS file handle */
#define EUCLEAN       117 /* Structure needs cleaning */
#define ENOTNAM       118 /* Not a XENIX named type file */
```

```
#define ENAVAIL      119 /* No XENIX semaphores available */
#define EISNAM       120 /* Is a named type file */
#define EREMOTEIO    121 /* Remote I/O error */
#define EDQUOT       122 /* Quota exceeded */

#define ENOMEDIUM    123 /* No medium found */
#define EMEDIUMTYPE  124 /* Wrong medium type */
#define ECANCELED    125 /* Operation Canceled */
#define ENOKEY       126 /* Required key not available */
#define EKEYEXPIRED  127 /* Key has expired */
#define EKEYREVOKED  128 /* Key has been revoked */
#define EKEYREJECTED    129 /* Key was rejected by service */

/* for robust mutexes */
#define EOWNERDEAD   130 /* Owner died */
#define ENOTRECOVERABLE 131 /* State not recoverable */

#endif
```

Posted on 20 March 2009.