




---

 AHELP for CIAO 3.4

## errno

Context: [slangrtl](#)

*Jump to:* [Description](#) [Example](#) [See Also](#)

---

## Synopsis

Error code set by system functions.

## Syntax

```
Integer_Type errno
```

## Description

A system function can fail for a variety of reasons. For example, a file operation may fail because lack of disk space, or the process does not have permission to perform the operation. Such functions will return `-1` and set the variable `errno` to an error code describing the reason for failure.

Particular values of `errno` may be specified by the following symbolic constants (read-only variables) and the corresponding `errno_string` value:

EPERM	"Not owner"
ENOENT	"No such file or directory"
ESRCH	"No such process"
ENXIO	"No such device or address"
ENOEXEC	"Exec format error"
EBADF	"Bad file number"
ECHILD	"No children"
ENOMEM	"Not enough core"
EACCES	"Permission denied"
EFAULT	"Bad address"
ENOTBLK	"Block device required"
EBUSY	"Mount device busy"
EEXIST	"File exists"
EXDEV	"Cross-device link"
ENODEV	"No such device"
ENOTDIR	"Not a directory"
EISDIR	"Is a directory"
EINVAL	"Invalid argument"
ENFILE	"File table overflow"
EMFILE	"Too many open files"
ENOTTY	"Not a typewriter"

ETXTBSY	"Text file busy"
EFBIG	"File too large"
ENOSPC	"No space left on device"
ESPIPE	"Illegal seek"
EROFS	"Read-only file system"
EMLINK	"Too many links"
EPIPE	"Broken pipe"
ELOOP	"Too many levels of symbolic links"
ENAMETOOLONG	"File name too long"

## Example

The `mkdir` function will attempt to create a directory. If that directory already exists, the function will fail and set `errno` to `EEXIST`.

```
define create_dir (dir)
{
  if (0 == mkdir (dir)) return;
  if (errno != EEXIST)
    error ("mkdir %s failed: %s", dir, errno_string);
}
```

## See Also

*slangrit*

[traceback](#), [chdir](#), [errno\\_string](#), [error](#), [fclose](#), [fgets](#), [getcwd](#), [message](#), [mkdir](#), [rename](#), [rmdir](#), [usage](#), [verror](#)

---

The Chandra X-Ray Center (CXC) is operated for NASA by the Smithsonian Astrophysical Observatory.  
60 Garden Street, Cambridge, MA 02138 USA.  
Smithsonian Institution, Copyright © 1998–2006. All rights reserved.

URL:  
<http://cxc.harvard.edu/ciao3.4/errno.tm.html>  
Last modified: December 2006