

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

AHELP for CIAO 3.4 OPEN Context: slangrtl

Jump to: Description See Also

Synopsis

Open a file

Syntax

```
FD_Type open (String_Type filename, Int_Type flags [,Int_Type mode])
```

Description

The open function attempts to open a file specified by the filename parameter according to the flags parameter, which must be one of the following values:

```
O_RDONLY (read-only)
O_WRONLY (write-only)
O_RDWR (read/write)
```

In addition, flags may also be bitwise—or'd with any of the following:

```
O_BINARY (open the file in binary mode)
O_TEXT (open the file in text mode)
O_CREAT (create file if it does not exist)
O_EXCL (fail if the file already exists)
O_NOCTTY (do not make the device the controlling terminal)
O_TRUNC (truncate the file if it exists)
O_APPEND (open the file in append mode)
O_NONBLOCK (open the file in non-blocking mode)
```

Some of these flags only make sense when combined with other flags. For example, if O_EXCL is used, then O_CREAT must also be specified, otherwise unpredictable behavior may result.

If O_CREAT is used for the flags parameter then the mode parameter must be present. mode specifies the permissions to use if a new file is created. The actual file permissions will be affected by the process's umask via mode&~umask. The mode parameter's value is constructed via bitwise—or of the following values:

```
S IRWXU
           (Owner has read/write/execute permission)
S_IRUSR
           (Owner has read permission)
S_IWUSR
           (Owner has write permission)
S_IXUSR
           (Owner has execute permission)
          (Group has read/write/execute permission)
S_IRWXG
S IRGRP
          (Group has read permission)
S_IWGRP
        (Group has write permission)
S_IXGRP
         (Group has execute permission)
```

open 1

Ahelp: open - CIAO 3.4

ĺ	S_IRWXO	(Others	have	read/write/execute permission)
I	S_IROTH	(Others	have	read permission)
ı	S_IWOTH	(Others	have	write permission)
I	S_IXOTH	(Others	have	execute permission)

Upon success open returns a file descriptor object (FD_Type), otherwise NULL is returned and errno is set.

If you are not familiar with the open system call, then it is recommended that you use fopen instead.

See Also

slangrtl

chdir, chmod, chown, clearerr, close, dup fd, fclose, fdopen, feof, ferror, fflush, fgets, fgetslines, fileno, fopen, fputs, fread, fseek, ftell, fwrite, isatty, listdir, lseek, lstat file, mkdir, mkfifo, popen, read, readlink, stat file, stat is, umask, write

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/open.tm.html
Last modified: December 2006

2 See Also