



 AHELP for CIAO 3.4

open

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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)
```

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S_IXUSR	(Owner has execute permission)
S_IRWXG	(Group has read/write/execute permission)
S_IRGRP	(Group has read permission)
S_IWGRP	(Group has write permission)
S_IXGRP	(Group has execute permission)
S_IRWXO	(Others have read/write/execute permission)
S_IROTH	(Others have read permission)
S_IWOTH	(Others have write permission)
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

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[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](#)

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