

NAME

elf_open - open ELF objects and ar(1) archives

LIBRARY

ELF Access Library (libelf, -lelf)

SYNOPSIS

```
#include <libelf.h>
```

Elf *

```
elf_open(int fd);
```

Elf *

```
elf_openmemory(char *image, size_t sz);
```

DESCRIPTION

Important: The functions **elf_open()** and **elf_openmemory()** are extensions to the elf(3) API, for the internal use of the Elftoolchain project. Portable applications should not use these functions.

The function **elf_open()** returns an Elf descriptor opened with mode ELF_C_READ for the ELF object or ar(1) archive referenced by the file descriptor in argument *fd*.

The function **elf_openmemory()** returns an ELF descriptor opened with mode ELF_C_READ for the ELF object or ar(1) archive contained in the memory area pointed to by the argument *image*. The argument *sz* specifies the size of the memory area in bytes.

RETURN VALUES

The function returns a pointer to a ELF descriptor if successful, or NULL if an error occurred.

COMPATIBILITY

These functions are non-standard extensions to the elf(3) API set.

The behavior of these functions differs from their counterparts elf_begin(3) and elf_memory(3) in that these functions will successfully open malformed ELF objects and ar(1) archives, returning an Elf descriptor of type ELF_K_NONE.

ERRORS

These functions can fail with the following errors:

[ELF_E_ARGUMENT]

The argument *fd* was of an unsupported file type.

[ELF_E_ARGUMENT]

The argument *sz* was zero, or the argument *image* was NULL.

[ELF_E_IO]

The file descriptor in argument *fd* was invalid.

[ELF_E_IO]

The file descriptor in argument *fd* could not be read.

[ELF_E_RESOURCE]

An out of memory condition was encountered.

[ELF_E_SEQUENCE]

Functions **elf_open()** or **elf_openmemory()** was called before a working version was established with **elf_version(3)**.

SEE ALSO

elf(3), elf_begin(3), elf_errno(3), elf_memory(3), gelf(3)