

NAME

`elf_memory` – create an ELF descriptor from a memory buffer

SYNOPSIS

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

```
Elf * elf_memory(char *" image , size_t size );
```

DESCRIPTION

The **elf_memory()** function creates a new ELF descriptor from a memory region containing an ELF object. This function is used when the ELF data is already present in memory rather than being read from a file descriptor.

The memory pointed to by *image* must contain a complete ELF file or archive. The contents must remain valid and unmodified for the lifetime of the resulting ELF descriptor.

The ELF descriptor returned by **elf_memory()** is opened in read-only mode using `ELF_C_READ_MMAP_PRIVATE` (see **elf_begin**). The underlying memory image should not be directly modified by the application while its ELF descriptor is open. Some libelf functions, such as **elf_compress()** and **gelf_update_***(), may internally modify the underlying image and therefore require that the underlying image be writable. The use of a read-only image (e.g., memory mapped with **PROT_READ** only) may result in failures or crashes.

PARAMETERS

image A pointer to a memory buffer that contains the complete contents of an ELF file or archive. If NULL, this function fails and returns NULL.

size The size in bytes of the memory region pointed to by *image*. Must be at least as much as a full ELF header and should cover the entire ELF object.

RETURN VALUE

On success, **elf_memory()** returns a pointer to an **Elf** descriptor representing the archive or ELF file contained in *image*.

On failure, it returns NULL and sets an error code retrievable by **elf_errmsg(3)**.

SEE ALSO

elf_begin(3), **elf_errmsg(3)**, **libelf(3)**, **elf(5)**

ATTRIBUTES**REPORTING BUGS**

Report bugs to <elfutils-devel@sourceware.org> or <https://sourceware.org/bugzilla/>.