

**NAME**

**elf32\_getehdr**, **elf64\_getehdr**, **gelf\_getehdr** - retrieve the object file header

**LIBRARY**

ELF Access Library (libelf, -lelf)

**SYNOPSIS**

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

```
Elf32_Ehdr *
```

```
elf32_getehdr(Elf *elf);
```

```
Elf64_Ehdr *
```

```
elf64_getehdr(Elf *elf);
```

```
#include <gelf.h>
```

```
GElf_Ehdr *
```

```
gelf_getehdr(Elf *elf, GElf_Ehdr *dst);
```

**DESCRIPTION**

These functions retrieve the ELF object file header from the ELF descriptor *elf* and return a translated header descriptor to their callers.

Functions **elf32\_getehdr()** and **elf64\_getehdr()** return a pointer to the appropriate class-specific header descriptor if it exists in the file referenced by descriptor *elf*. These functions return NULL if an ELF header was not found in file *elf*.

Function **gelf\_getehdr()** stores a translated copy of the header for ELF file *elf* into the descriptor pointed to by argument *dst*. It returns argument *dst* if successful or NULL in case of failure.

**RETURN VALUES**

These functions return a pointer to a translated header descriptor if successful, or NULL on failure.

**ERRORS**

These functions can fail with the following errors:

[ELF\_E\_ARGUMENT]

The argument *elf* was null.

[ELF\_E\_ARGUMENT]

Argument *elf* was not a descriptor for an ELF file.

[ELF\_E\_ARGUMENT]

The elf class of descriptor *elf* was not recognized.

[ELF\_E\_ARGUMENT]

Argument *dst* was null.

[ELF\_E\_CLASS]

The ELF class of descriptor *elf* did not match that of the API function being called.

[ELF\_E\_HEADER]

ELF descriptor *elf* does not have an associated header.

[ELF\_E\_RESOURCE]

An out of memory condition was detected during execution.

[ELF\_E\_SECTION]

The ELF descriptor in argument *elf* did not adhere to the conventions used for extended numbering.

[ELF\_E\_VERSION]

The ELF descriptor *elf* had an unsupported ELF version number.

#### SEE ALSO

elf(3), elf32\_newehdr(3), elf64\_newehdr(3), elf\_flagehdr(3), elf\_getident(3), gelf(3), gelf\_newehdr(3), elf(5)