NAME

elf32_newphdr, **elf64_newphdr**, **gelf_newphdr** - allocate an ELF program header table

LIBRARY

ELF Access Library (libelf, -lelf)

SYNOPSIS

#include <libelf.h>

*Elf32_Phdr **
elf32_newphdr(*Elf *elf, size_t count*);

*Elf64_Phdr **
elf64_newphdr(*Elf *elf, size_t count*);

#include <gelf.h>

*void **
gelf_newphdr(*Elf *elf, size_t count*);

DESCRIPTION

These functions allocate an ELF Program Header table for an ELF descriptor. *Elf32_Phdr* and *Elf64_Phdr* descriptors are described further in elf(5).

Functions **elf32_newphdr**() and **elf64_newphdr**() allocate a table of *count Elf32_Phdr* and *Elf64_Phdr* descriptors respectively, discarding any existing program header table already present in the ELF descriptor *elf*. A value of zero for argument *count* may be used to delete an existing program header table from an ELF descriptor.

Function **gelf_newphdr**() will return a table of *Elf32_Phdr* or *Elf64_Phdr* with *count* elements depending on the ELF class of ELF descriptor *elf*.

The functions set the ELF_F_DIRTY flag on the program header table. All members of the returned array of Phdr structures will be initialized to zero.

After a successful call to these functions, the pointer returned by a prior call to **elf32_getphdr**() or **elf64_getphdr**() on the same descriptor *elf* will no longer be valid.

RETURN VALUES

The functions a valid pointer if successful, or NULL in case an error was encountered.

COMPATIBILITY

The **gelf_newphdr**() function uses a type of *void* * for its returned value. This differs from some other implementations of the elf(3) API, which use an *unsigned long* return type.

ERRORS

These functions may fail with the following errors:

[ELF_E_ARGUMENT]
Argument *elf* was NULL.

[ELF_E_ARGUMENT]
Argument *elf* was not a descriptor for an ELF object.

[ELF_E_CLASS] ELF descriptor *elf* was of an unrecognized class.

[ELF_E_RESOURCE] An out of memory condition was detected.

[ELF_E_SEQUENCE] An executable header was not allocated for ELF descriptor *elf* before using these APIs.

SEE ALSO

elf(3), elf32_getphdr(3), elf32_newehdr(3), elf64_getphdr(3), elf64_newehdr(3), elf_flagphdr(3), elf_getphnum(3), gelf(3), gelf_getphdr(3), gelf_newehdr(3), elf(5)