

**NAME**

**elf\_getarsym** - retrieve the symbol table of an archive

**LIBRARY**

ELF Access Library (libelf, -lelf)

**SYNOPSIS**

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

```
Elf_Arsym *
```

```
elf_getarsym(Elf *elf, size_t *ptr);
```

**DESCRIPTION**

The function **elf\_getarsym**() retrieves the symbol table for an ar(1) archive, if one is available.

Argument *elf* should be a descriptor for an ar(1) archive opened using **elf\_begin**() or **elf\_memory**() .

If the archive *elf* contains a symbol table with *n* entries, this function returns a pointer to an array of *n*+1 *Elf\_Arsym* structures. An *Elf\_Arsym* structure has the following elements:

*char \* as\_name*

This structure member is a pointer to a null-terminated symbol name.

*off\_t as\_off*

This structure member contains the byte offset from the beginning of the archive to the header for the archive member. This value is suitable for use with **elf\_rand**(3).

*unsigned long as\_hash*

This structure member contains a portable hash value for the symbol name, as computed by **elf\_hash**(3).

The last entry of the returned array will have a NULL value for member *as\_name*, a zero value for member *as\_off* and an illegal value of ~0UL for *as\_hash*.

If argument *ptr* is non-null, the **elf\_getarsym**() function will store the number of table entries returned (including the sentinel entry at the end) into the location it points to.

**RETURN VALUES**

Function **elf\_getarsym**() returns a pointer to an array of *Elf\_Arsym* structures if successful, or a NULL pointer if an error was encountered.

If argument *ptr* is non-null and there was no error, the library will store the number of archive symbol entries returned into the location it points to. If argument *ptr* is non-null and an error was encountered,

the library will set the location pointed to by it to zero.

## ERRORS

Function **elf\_getarsym()** may fail with the following errors:

[ELF\_E\_ARGUMENT]

Argument *elf* was NULL.

[ELF\_E\_ARGUMENT]

Argument *elf* was not a descriptor for an ar(1) archive.

## SEE ALSO

elf(3), elf\_begin(3), elf\_getarhdr(3), elf\_hash(3), elf\_memory(3), elf\_next(3), elf\_rand(3)