

**NAME**

**elf32\_checksum**, **elf64\_checksum**, **gelf\_checksum** - return the checksum of an ELF object

**LIBRARY**

ELF Access Library (libelf, -lelf)

**SYNOPSIS**

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

*long*

```
elf32_checksum(Elf *elf);
```

*long*

```
elf64_checksum(Elf *elf);
```

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

*long*

```
gelf_checksum(Elf *elf);
```

**DESCRIPTION**

These functions return a simple checksum of the ELF object described by their argument *elf*. The checksum is computed in way that allows its value to remain unchanged in presence of modifications to the ELF object by utilities like strip(1).

Function **elf32\_checksum()** returns a checksum for an ELF descriptor *elf* of class ELFCLASS32.

Function **elf64\_checksum()** returns a checksum for an ELF descriptor *elf* of class ELFCLASS64.

Function **gelf\_checksum()** provides a class-independent way retrieving the checksum for ELF object *elf*.

**RETURN VALUES**

These functions return the checksum of the ELF object, or zero in case an error was encountered.

**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 file.

**[ELF\_E\_ARGUMENT]**

The ELF descriptor *elf* was not opened for reading or updating.

**[ELF\_E\_CLASS]**

For functions **elf32\_checksum()** and **elf64\_checksum()**, ELF descriptor *elf* did not match the class of the called function.

**[ELF\_E\_HEADER]**

The ELF object specified by argument *elf* had a malformed executable header.

**[ELF\_E\_RESOURCE]**

An out of memory condition was detected during processing.

**[ELF\_E\_SECTION]**

The ELF object specified by argument *elf* contained a section with a malformed section header.

**[ELF\_E\_VERSION]**

The ELF object was of an unsupported version.

**SEE ALSO**

strip(1), elf(3), gelf(3)