

NAME

`size` – list section sizes and total size of binary files

SYNOPSIS

```
size [-A|-B|-G|--format=compatibility]
      [--help]
      [-d|-o|-x|--radix=number]
      [--common]
      [-t|--totals]
      [--target=bfdname] [-V|--version]
      [objfile...]
```

DESCRIPTION

The GNU **size** utility lists the section sizes and the total size for each of the binary files *objfile* on its argument list. By default, one line of output is generated for each file or each module if the file is an archive.

objfile... are the files to be examined. If none are specified, the file `a.out` will be used instead.

OPTIONS

The command-line options have the following meanings:

```
-A
-B
-G
--format=compatibility
```

Using one of these options, you can choose whether the output from GNU **size** resembles output from System V **size** (using **-A**, or **--format=sysv**), or Berkeley **size** (using **-B**, or **--format=berkeley**). The default is the one-line format similar to Berkeley's. Alternatively, you can choose the GNU format output (using **-G**, or **--format=gnu**), this is similar to Berkeley's output format, but sizes are counted differently.

Here is an example of the Berkeley (default) format of output from **size**:

```
$ size --format=Berkeley ranlib size
      text      data      bss      dec      hex filename
294880    81920    11592   388392   5ed28 ranlib
294880    81920    11888   388688   5ee50 size
```

The Berkeley style output counts read only data in the `text` column, not in the `data` column, the `dec` and `hex` columns both display the sum of the `text`, `data`, and `bss` columns in decimal and hexadecimal respectively.

The GNU format counts read only data in the `data` column, not the `text` column, and only displays the sum of the `text`, `data`, and `bss` columns once, in the `total` column. The **--radix** option can be used to change the number base for all columns. Here is the same data displayed with GNU conventions:

```
$ size --format=GNU ranlib size
      text      data      bss      total filename
279880     96920     11592    388392 ranlib
279880     96920     11888    388688 size
```

This is the same data, but displayed closer to System V conventions:

```
$ size --format=SysV ranlib size
ranlib :
section          size          addr
.text            294880         8192
.data            81920         303104
.bss             11592         385024
Total            388392
```

```
size :
section          size          addr
.text            294880         8192
.data            81920         303104
.bss             11888         385024
Total            388688
```

--help

Show a summary of acceptable arguments and options.

-d**-o****-x****--radix=number**

Using one of these options, you can control whether the size of each section is given in decimal (**-d**, or **--radix=10**); octal (**-o**, or **--radix=8**); or hexadecimal (**-x**, or **--radix=16**). In **--radix=number**, only the three values (8, 10, 16) are supported. The total size is always given in two radices; decimal and hexadecimal for **-d** or **-x** output, or octal and hexadecimal if you're using **-o**.

--common

Print total size of common symbols in each file. When using Berkeley or GNU format these are included in the bss size.

-t**--totals**

Show totals of all objects listed (Berkeley or GNU format mode only).

--target=bfdname

Specify that the object-code format for *objfile* is *bfdname*. This option may not be necessary; **size** can automatically recognize many formats.

-V**--version**

Display the version number of **size**.

@file

Read command-line options from *file*. The options read are inserted in place of the original **@file** option. If *file* does not exist, or cannot be read, then the option will be treated literally, and not removed.

Options in *file* are separated by whitespace. A whitespace character may be included in an option by surrounding the entire option in either single or double quotes. Any character (including a backslash) may be included by prefixing the character to be included with a backslash. The *file* may itself contain additional **@file** options; any such options will be processed recursively.

SEE ALSO

ar(1), **objdump**(1), **readelf**(1), and the Info entries for *binutils*.

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