

**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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