

NAME

llvm-size - print size information

SYNOPSIS

llvm-size [*options*] [*input...*]

DESCRIPTION

llvm-size is a tool that prints size information for binary files. It is intended to be a drop-in replacement for GNU's **size**.

The tool prints size information for each **input** specified. If no input is specified, the program prints size information for **a.out**. If "-" is specified as an input file, **llvm-size** reads a file from the standard input stream. If an input is an archive, size information will be displayed for all its members.

OPTIONS

-A Equivalent to *--format* with a value of **sysv**.

--arch=<arch>

Architecture(s) from Mach-O universal binaries to display information for.

-B Equivalent to *--format* with a value of **berkeley**.

--common

Include ELF common symbol sizes in bss size for **berkeley** output format, or as a separate section entry for **sysv** output. If not specified, these symbols are ignored.

-d Equivalent to *--radix* with a value of **10**.

-l Display verbose address and offset information for segments and sections in Mach-O files in **darwin** format.

--format=<format>

Set the output format to the **<format>** specified. Available **<format>** options are **berkeley** (the default), **sysv** and **darwin**.

Berkeley output summarises text, data and bss sizes in each file, as shown below for a typical pair of ELF files:

```
$ llvm-size --format=berkeley test.o test2.o
```

text	data	bss	dec	hex	filename
182	16	5	203	cb	test.elf
82	8	1	91	5b	test2.o

For Mach-O files, the output format is slightly different:

```
$ llvm-size --format=berkeley macho.obj macho2.obj
__TEXT __DATA __OBJC others dec hex
4 8 0 0 12 c macho.obj
16 32 0 0 48 30 macho2.obj
```

Sysv output displays size and address information for most sections, with each file being listed separately:

```
$ llvm-size --format=sysv test.elf test2.o
test.elf :
section  size  addr
.eh_frame  92 2097496
.text      90 2101248
.data      16 2105344
.bss       5 2105360
.comment   209 0
Total     412

test2.o :
section  size  addr
.text      26 0
.data      8 0
.bss       1 0
.comment   106 0
.note.GNU-stack 0 0
.eh_frame  56 0
.llvm_addrsig 2 0
Total     199
```

darwin format only affects Mach-O input files. If an input of a different file format is specified, **llvm-size** falls back to **berkeley** format. When producing **darwin** format, the tool displays information about segments and sections:

```
$ llvm-size --format=darwin macho.obj macho2.obj
```

```

macho.obj:
Segment : 12
  Section (__TEXT, __text): 4
  Section (__DATA, __data): 8
  total 12
total 12
macho2.obj:
Segment : 48
  Section (__TEXT, __text): 16
  Section (__DATA, __data): 32
  total 48
total 48

```

--help, -h

Display a summary of command line options.

-m Equivalent to *--format* with a value of **darwin**.

-o Equivalent to *--radix* with a value of **8**.

--radix=<value>

Display size information in the specified radix. Permitted values are **8**, **10** (the default) and **16** for octal, decimal and hexadecimal output respectively.

Example:

```

$ llvm-size --radix=8 test.o
text data bss oct hex filename
0152 04 04 162 72 test.o

```

```

$ llvm-size --radix=10 test.o
text data bss dec hex filename
106 4 4 114 72 test.o

```

```

$ llvm-size --radix=16 test.o
text data bss dec hex filename
0x6a 0x4 0x4 114 72 test.o

```

--totals, -t

Applies only to **berkeley** output format. Display the totals for all listed fields, in addition to the

individual file listings.

Example:

```
$ llvm-size --totals test.elf test2.o
text  data  bss  dec  hex filename
182   16    5   203   cb test.elf
 82    8    1    91   5b test2.o
264   24    6   294  126 (TOTALS)
```

--version

Display the version of the **llvm-size** executable.

-x Equivalent to **--radix** with a value of **16**.

@<FILE>

Read command-line options from response file **<FILE>**.

EXIT STATUS

llvm-size exits with a non-zero exit code if there is an error. Otherwise, it exits with code 0.

BUGS

To report bugs, please visit <https://github.com/llvm/llvm-project/labels/tools:llvm-size/>.

AUTHOR

Maintained by the LLVM Team (<https://llvm.org/>).

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