

NAME

strings - print the strings of printable characters in files

SYNOPSIS

```
strings [-a | --all] [-e encoding | --encoding=encoding] [-f | --print-file-name] [-h | --help]
        [-n number | --bytes=number | -number] [-o] [-t radix | --radix=radix] [-v | --version] [file ...]
```

DESCRIPTION

For each *file* specified, the **strings** utility prints contiguous sequences of printable characters that are at least *n* characters long and are followed by an unprintable character. The default value of *n* is 4. By default, the **strings** utility only scans the initialized and loaded sections of ELF objects; for other file types, the entire file is scanned. The **strings** utility is mainly used for determining the contents of non-text files.

If no file name is specified as an argument, standard input is read.

The following options are available:

-a | --all

For ELF objects, scan the entire file for printable strings.

-e *encoding* | --encoding=*encoding*

Select the character encoding to be used while searching for strings. Valid values for argument *encoding* are:

s for single 7-bit-byte characters (ASCII, ISO 8859).

S for single 8-bit-byte characters.

l for 16-bit little-endian.

b for 16-bit big-endian.

L for 32-bit little-endian.

B for 32-bit big-endian.

The default is to assume that characters are encoded using a single 7-bit byte.

-f | --print-file-name

Print the name of the file before each string.

-h | --help

Print a usage summary and exit.

-n *number* | --bytes=*number* | -*number*

Print the contiguous character sequence of at least *number* characters long, instead of the default

of 4 characters. Argument *number* should specify a positive decimal integer.

-o Equivalent to specifying **-t o**.

-t radix | --radix=radix

Print the offset from the start of the file before each string using the specified radix. Valid values for argument *radix* are:

d for decimal

o for octal

x for hexadecimal

-v | --version

Display a version identifier and exit.

EXIT STATUS

The **strings** utility exits 0 on success, and >0 if an error occurs.

EXAMPLES

To display strings in */bin/l*s use:

```
$ strings /bin/l
```

To display strings in all sections of */bin/l*n use:

```
$ strings -a /bin/l
```

To display strings in all sections of */bin/c*at prefixed with the filename and the offset within the file use:

```
$ strings -a -f -t x /bin/c
```

SEE ALSO

ar(1), nm(1), objdump(1), ranlib, readelf(1), size(1)

HISTORY

The first FreeBSD **strings** utility appeared in FreeBSD v3. It was later discontinued in FreeBSD v5, when i386-only a.out format was dropped in favor of ELF.

AUTHORS

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