#### **NAME**

strings – print the strings of printable characters in files.

# **SYNOPSIS**

```
strings [-afov] [-min-len]
[-n min-len] [--bytes=min-len]
[-t radix] [--radix=radix]
[-e encoding] [--encoding=encoding]
[-] [--all] [--print-file-name]
[--target=bfdname]
[--help] [--version] file...
```

### **DESCRIPTION**

For each *file* given, GNU **strings** prints the printable character sequences that are at least 4 characters long (or the number given with the options below) and are followed by an unprintable character. By default, it only prints the strings from the initialized and loaded sections of object files; for other types of files, it prints the strings from the whole file.

strings is mainly useful for determining the contents of non-text files.

## **OPTIONS**

-a

--all

Do not scan only the initialized and loaded sections of object files; scan the whole files.

-f

## --print-file-name

Print the name of the file before each string.

#### --help

Print a summary of the program usage on the standard output and exit.

-min-len

-n min-len

--bvtes=min-len

Print sequences of characters that are at least min-len characters long, instead of the default 4.

-o Like −t o. Some other versions of **strings** have -o act like −t d instead. Since we can not be compatible with both ways, we simply chose one.

-t radix

### --radix=radix

Print the offset within the file before each string. The single character argument specifies the radix of the offset— $-\mathbf{o}$  for octal,  $\mathbf{x}$  for hexadecimal, or  $\mathbf{d}$  for decimal.

-e encoding

## --encoding=encoding

Select the character encoding of the strings that are to be found. Possible values for *encoding* are:  $\mathbf{s} = \text{single-}7\text{-bit-byte}$  characters (ASCII, ISO 8859, etc., default),  $\mathbf{S} = \text{single-}8\text{-bit-byte}$  characters,  $\mathbf{b} = 16\text{-bit}$  bigendian,  $\mathbf{l} = 16\text{-bit}$  littleendian,  $\mathbf{B} = 32\text{-bit}$  bigendian,  $\mathbf{L} = 32\text{-bit}$  littleendian. Useful for finding wide character strings.

#### --target=bfdname

Specify an object code format other than your system's default format.

-v

### --version

Print the program version number on the standard output and exit.

### **SEE ALSO**

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

# **COPYRIGHT**

Copyright (c) 1991, 92, 93, 94, 95, 96, 97, 98, 99, 2000, 2001, 2002, 2003 Free Software Foundation, Inc.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.1 or any later version published by the Free Software Foundation; with no Invariant Sections, with no Front-Cover Texts, and with no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".

binutils-2.13.90 2003-04-27 2