

NAME

readelf – Displays information about ELF files.

SYNOPSIS

```
readelf [-a|--all]
        [-h|--file-header]
        [-l|--program-headers|--segments]
        [-S|--section-headers|--sections]
        [-e|--headers]
        [-s|--syms|--symbols]
        [-n|--notes]
        [-r|--relocs]
        [-u|--unwind]
        [-d|--dynamic]
        [-V|--version-info]
        [-A|--arch-specific]
        [-D|--use-dynamic]
        [-x <number>|--hex-dump=<number>]
        [-w[liaprmfFso]|
        --debug-dump[=line,=info,=abbrev,=pub-
names,=ranges,=macro,=frames,=frames-interp,=str,=loc]]
        [-I|--histogram]
        [-v|--version]
        [-W|--wide]
        [-H|--help]
elffile...
```

DESCRIPTION

readelf displays information about one or more ELF format object files. The options control what particular information to display.

elffile... are the object files to be examined. At the moment, **readelf** does not support examining archives, nor does it support examining 64 bit ELF files.

OPTIONS

The long and short forms of options, shown here as alternatives, are equivalent. At least one option besides **-v** or **-H** must be given.

-a

--all

Equivalent to specifying **--file-header**, **--program-headers**, **--sections**, **--symbols**, **--relocs**, **--dynamic**, **--notes** and **--version-info**.

-h

--file-header

Displays the information contained in the ELF header at the start of the file.

-l

--program-headers

--segments

Displays the information contained in the file's segment headers, if it has any.

-S

--sections

--section-headers

Displays the information contained in the file's section headers, if it has any.

-s

--symbols
--syms
 Displays the entries in symbol table section of the file, if it has one.

-e
--headers
 Display all the headers in the file. Equivalent to **-h -l -S**.

-n
--notes
 Displays the contents of the NOTE segment, if it exists.

-r
--relocs
 Displays the contents of the file's relocation section, if it has one.

-u
--unwind
 Displays the contents of the file's unwind section, if it has one. Only the unwind sections for IA64 ELF files are currently supported.

-u
--unwind
 Displays the contents of the file's unwind section, if it has one. Only the unwind sections for IA64 ELF files are currently supported.

-d
--dynamic
 Displays the contents of the file's dynamic section, if it has one.

-V
--version-info
 Displays the contents of the version sections in the file, if they exist.

-A
--arch-specific
 Displays architecture-specific information in the file, if there is any.

-D
--use-dynamic
 When displaying symbols, this option makes **readelf** use the symbol table in the file's dynamic section, rather than the one in the symbols section.

-x <number>
--hex-dump=<number>
 Displays the contents of the indicated section as a hexadecimal dump.

-w[liaprmfFso]
--debug-dump[=line,=info,=abbrev,=pubnames,=ranges,=macro,=frames,=frames-interp,=str,=loc]
 Displays the contents of the debug sections in the file, if any are present. If one of the optional letters or words follows the switch then only data found in those specific sections will be dumped.

-I
--histogram
 Display a histogram of bucket list lengths when displaying the contents of the symbol tables.

-v
--version
 Display the version number of readelf.

-W

--wide

Don't break output lines to fit into 80 columns. By default **readelf** breaks section header and segment listing lines for 64-bit ELF files, so that they fit into 80 columns. This option causes **readelf** to print each section header resp. each segment on a single line, which is far more readable on terminals wider than 80 columns.

-H

--help

Display the command line options understood by **readelf**.

SEE ALSO

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

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