

NAME

srec_cmp – compare two EPROM load files for equality

SYNOPSIS

srec_cmp [*option...*] *filename...*

srec_cmp -Help

srec_cmp -VERSion

DESCRIPTION

The *srec_cmp* program is used to compare two EPROM load files for equality. This comparison is performed irrespective of the load order of the data in each of the files.

INPUT FILE SPECIFICATIONS

Input may be qualified in two ways: you may specify a data file or a data generator. format and you may specify filters to apply to them. An input file specification looks like this:

data-file [*filter ...*]

data-generator [*filter ...*]

Data Files

Input from data files is specified by file name and format name. An input file specification looks like this:

filename [*format*] [*-ignore-checksums*]

The default format is Motorola S-Record format, but *many* others are also understood.

Data Generators

It is also possible to generate data, rather than read it from a file. You may use a generator anywhere you could use a file. An input generator specification looks like this:

-GENERate *address-range* *-data-source*

Generators include random data and various forms of constant data.

Common Manual Page

See *srec_input(1)* for complete details of input specifiers. This description in a separate manual page because it is common to more than one SRecord command.

OPTIONS

The following options are understood:

@filename

The named text file is read for additional command line arguments. Arguments are separated by white space (space, tab, newline, *etc*). There is no wildcard mechanism. There is no quoting mechanism. Comments, which start with '#' and extend to the end of the line, are ignored. Blank lines are ignored.

-Help

Provide some help with using the *srec_cmp* program.

-Ignore_Checksums

The *-ignore-checksums* option may be used to disable checksum validation of input files, for those formats which have checksums at all. Note that the checksum values are still read in and parsed (so it is still an error if they are missing) but their values are not checked. Used after an input file name, the option affects that file alone; used anywhere else on the command line, it applies to all following files.

-Enable_Sequence_Warnings

This option may be used to enable warnings about input files where the data records are not in strictly ascending address order. Only one warning is issued per input. This is the default. **Note:** the output of *srec_cat(1)* is always in this order.

-Disable_Sequence_Warnings

This option may be used to disable warnings about input files where the data records are not in strictly ascending address order.

-MULTiple

Use this option to permit a file to contain multiple (contradictory) values for some memory locations. A warning will be printed. The last value in the file will be used. The default is for this condition to be a fatal error.

-VERSion

Print the version of the *srec_cmp* program being executed.

-Verbose

This option may be used to obtain more information about how and where the two files differ. Please note that this takes longer, and the output can be voluminous.

All other options will produce a diagnostic error.

All options may be abbreviated; the abbreviation is documented as the upper case letters, all lower case letters and underscores (_) are optional. You must use consecutive sequences of optional letters.

All options are case insensitive, you may type them in upper case or lower case or a combination of both, case is not important.

For example: the arguments “-help”, “-HEL” and “-h” are all interpreted to mean the **-Help** option. The argument “-hlp” will not be understood, because consecutive optional characters were not supplied.

Options and other command line arguments may be mixed arbitrarily on the command line.

The GNU long option names are understood. Since all option names for *srec_cmp* are long, this means ignoring the extra leading “-”. The “--option=value” convention is also understood.

EXIT STATUS

The *srec_cmp* command will exit with a status of 1 on any error. The *srec_cmp* command will only exit with a status of 0 if there are no errors.

EXAMPLE

A common use for the *srec_cmp* command is to verify that a particular signature is present in the code. In this example, the signature is in a file called “signature”, and the EPROM image is in a file called “image”. We assume they are both Motorola S-Record format, although this will work for all formats:

```
srec_cmp signature image -crop -within signature
```

The signature need not be at the start of memory, nor need it be one single contiguous piece of memory. In the above example, the portions of the image which have the same address range as the signature are compared with the signature.

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srec_cmp version 1.47

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AUTHOR

Peter Miller E-Mail: pmiller@opensource.org.au
 ^\^* WWW: http://miller.emu.id.au/pmiller/