Red Hat Enterprise Linux Release 9.2 Manual Pages on 'cryptsetup-repair.8' command

$ man cryptsetup-repair.8

CRYPTSETUP-REPAIR(8)   Maintenance Commands   CRYPTSETUP-REPAIR(8)

NAME

   cryptsetup-repair - repair the device metadata

SYNOPSIS

   cryptsetup repair [<options>] <device>

DESCRIPTION

   Tries to repair the device metadata if possible. Currently supported

   only for LUKS device type.

   This command is useful to fix some known benign LUKS metadata header

   corruptions. Only basic corruptions of unused keyslot are fixable. This

   command will only change the LUKS header, not any key-slot data. You

   may enforce LUKS version by adding --type option.

   It also repairs (upgrades) LUKS2 reencryption metadata by adding a

   metadata digest that protects it against malicious changes.

   If LUKS2 reencryption was interrupted in the middle of writing

   reencryption segment the repair command can be used to perform

   reencryption recovery so that reencryption can continue later.

   Repairing reencryption requires verification of reencryption keyslot so

   passphrase or keyfile is needed.

   <options> can be [--timeout, --verify-passphrase, --disable-locks,

   --type, --header, --key-file, --keyfile-size, --keyfile-offset,

   --key-slot].

   WARNING: Always create a binary backup of the original header before

calling this command.

OPTIONS

--type <device-type>

Specifies required device type, for more info read BASIC ACTIONS

section in cryptsetup(8).

--verify-passphrase, -y

When interactively asking for a passphrase, ask for it twice and

complain if both inputs do not match. Ignored on input from file or

stdin.

--key-file, -d name

Read the passphrase from file.

If the name given is "-", then the passphrase will be read from

stdin. In this case, reading will not stop at newline characters.

See section NOTES ON PASSPHRASE PROCESSING in cryptsetup(8) for

more information.

--keyfile-offset value

Skip value bytes at the beginning of the key file.

--keyfile-size, -l value

Read a maximum of value bytes from the key file. The default is to

read the whole file up to the compiled-in maximum that can be

queried with --help. Supplying more data than the compiled-in

maximum aborts the operation.

This option is useful to cut trailing newlines, for example. If

--keyfile-offset is also given, the size count starts after the

offset.

--key-slot, -S <0-N>

For LUKS operations that add key material, this option allows you

to specify which key slot is selected for the new key.

The maximum number of key slots depends on the LUKS version. LUKS1

can have up to 8 key slots. LUKS2 can have up to 32 key slots based

on key slot area size and key size, but a valid key slot ID can

always be between 0 and 31 for LUKS2.

--timeout, -t <number of seconds>

The number of seconds to wait before timeout on passphrase input via terminal. It is relevant every time a passphrase is asked. It has no effect if used in conjunction with --key-file.

This option is useful when the system should not stall if the user does not input a passphrase, e.g. during boot. The default is a value of 0 seconds, which means to wait forever.

--header <device or file storing the LUKS header>

Use a detached (separated) metadata device or file where the LUKS header is stored. This option allows one to store ciphertext and LUKS header on different devices.

For commands that change the LUKS header (e.g. luksAddKey), specify the device or file with the LUKS header directly as the LUKS device.

--disable-locks

Disable lock protection for metadata on disk. This option is valid only for LUKS2 and ignored for other formats.

WARNING: Do not use this option unless you run cryptsetup in a restricted environment where locking is impossible to perform (where /run directory cannot be used).

--batch-mode, -q

Suppresses all confirmation questions. Use with care!

If the --verify-passphrase option is not specified, this option also switches off the passphrase verification.

--debug or --debug-json

Run in debug mode with full diagnostic logs. Debug output lines are always prefixed by #.

If --debug-json is used, additional LUKS2 JSON data structures are printed.

--version, -V

Show the program version.

--usage

Show short option help.

--help, -?

Show help text and default parameters. == REPORTING BUGS

Report bugs at cryptsetup mailing list <cryptsetup@lists.linux.dev> or

in Issues project section

<https://gitlab.com/cryptsetup/cryptsetup/-/issues/new>.

Please attach output of the failed command with --debug option added.

SEE ALSO

Cryptsetup FAQ

<https://gitlab.com/cryptsetup/cryptsetup/wikis/FrequentlyAskedQuestions>

cryptsetup(8), integritysetup(8) and veritysetup(8)

CRYPTSETUP

Part of cryptsetup project <https://gitlab.com/cryptsetup/cryptsetup/>.

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