

NAME

e4crypt – ext4 file system encryption utility

SYNOPSIS

```
e4crypt add_key -S [ -k keyring ] [ -v ] [ -q ] [ -p pad ] [ path ... ]
e4crypt new_session
e4crypt get_policy path ...
e4crypt set_policy [ -p pad ] policy path ...
```

DESCRIPTION

e4crypt performs encryption management for ext4 file systems.

COMMANDS

```
e4crypt add_key [ -vq ] [ -S salt ] [ -k keyring ] [ -p pad ] [ path ... ]
```

Prompts the user for a passphrase and inserts it into the specified keyring. If no keyring is specified, **e4crypt** will use the session keyring if it exists or the user session keyring if it does not.

The *salt* argument is interpreted in a number of different ways, depending on how its prefix value. If the first two characters are "s:", then the rest of the argument will be used as a text string and used as the salt value. If the first two characters are "0x", then the rest of the argument will be parsed as a hex string as used as the salt. If the first characters are "f:" then the rest of the argument will be interpreted as a filename from which the salt value will be read. If the string begins with a '/' character, it will similarly be treated as filename. Finally, if the *salt* argument can be parsed as a valid UUID, then the UUID value will be used as a salt value.

The *keyring* argument specifies the keyring to which the key should be added.

The *pad* value specifies the number of bytes of padding will be added to directory names for obfuscation purposes. Valid *pad* values are 4, 8, 16, and 32.

If one or more directory paths are specified, **e4crypt** will try to set the policy of those directories to use the key just added by the **add_key** command. If a salt was explicitly specified, then it will be used to derive the encryption key of those directories. Otherwise a directory-specific default salt will be used.

```
e4crypt get_policy path ...
```

Print the policy for the directories specified on the command line.

```
e4crypt new_session
```

Give the invoking process (typically a shell) a new session keyring, discarding its old session keyring.

```
e4crypt set_policy [ -p pad ] policy path ...
```

Sets the policy for the directories specified on the command line. All directories must be empty to set the policy; if the directory already has a policy established, **e4crypt** will validate that the policy matches what was specified. A policy is an encryption key identifier consisting of 16 hexadecimal characters.

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SEE ALSO

keyctl(1), **mke2fs**(8), **mount**(8).