

NAME

crypt_checksalt — validate a crypt setting string

LIBRARY

Crypt Library (libcrypt, -lcrypt)

SYNOPSIS

```
#include <crypt.h>

int
crypt_checksalt(const char *setting);
```

DESCRIPTION

crypt_checksalt checks the *setting* string against the system configuration and reports whether the hashing method and parameters it specifies are acceptable. It is intended to be used by programs such as `login(1)` to determine whether the user's passphrase should be re-hashed using the currently preferred hashing method.

RETURN VALUES

The return value is 0 if there is nothing wrong with this setting. Otherwise, it is one of the following constants:

`CRYPT_SALT_OK`

setting is a fully correct setting string. This constant is guaranteed to equal 0.

`CRYPT_SALT_INVALID`

setting is not a valid setting string; either it specifies a hashing method that is not known to this version of `libxcrypt`, or it specifies invalid parameters for the method.

`CRYPT_SALT_METHOD_DISABLED` (Not implemented, yet)

setting specifies a hashing method that is no longer allowed to be used at all; **crypt** will fail if passed this *setting*. Manual intervention will be required to reactivate the user's account.

`CRYPT_SALT_METHOD_LEGACY` (Not implemented, yet)

setting specifies a hashing method that is no longer considered strong enough for use with new passphrases. **crypt** will still authenticate a passphrase against this setting, but if authentication succeeds, the passphrase should be re-hashed using the currently preferred method.

`CRYPT_SALT_TOO_CHEAP` (Not implemented, yet)

setting specifies cost parameters that are considered too cheap for use with new passphrases. **crypt** will still authenticate a passphrase against this setting, but if authentication succeeds, the passphrase should be re-hashed using the currently preferred method.

FEATURE TEST MACROS

`<crypt.h>` will define the macro `CRYPT_CHECKSALT_AVAILABLE` if **crypt_checksalt** is available in the current version of `libxcrypt`.

BUGS

Since full configurability is not yet implemented, the current implementation will only ever return `CRYPT_SALT_OK` (0) or `CRYPT_SALT_INVALID` when invoked.

PORTABILITY NOTES

The function **crypt_checksalt** is not part of any standard. It was added to `libxcrypt` in version 4.3.0.

ATTRIBUTES

For an explanation of the terms used in this section, see `attributes(7)`.

Interface	Attribute	Value
<code>crypt_checksalt</code>	Thread safety	MT-Safe

SEE ALSO

`crypt(3)`, `crypt_gensalt(3)`, `crypt(5)`