



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'MD2_Final.3oss1' command

\$ man MD2_Final.3oss1

MD5(3oss1) OpenSSL MD5(3oss1)

NAME

MD2, MD4, MD5, MD2_Init, MD2_Update, MD2_Final, MD4_Init, MD4_Update, MD4_Final, MD5_Init, MD5_Update, MD5_Final - MD2, MD4, and MD5 hash functions

SYNOPSIS

```
#include <openssl/md2.h>
```

The following functions have been deprecated since OpenSSL 3.0, and can be hidden entirely by defining OPENSSL_API_COMPAT with a suitable version value, see openssl_user_macros(7):

```
unsigned char *MD2(const unsigned char *d, unsigned long n, unsigned char *md);
```

```
int MD2_Init(MD2_CTX *c);
```

```
int MD2_Update(MD2_CTX *c, const unsigned char *data, unsigned long len);
```

```
int MD2_Final(unsigned char *md, MD2_CTX *c);
```

```
#include <openssl/md4.h>
```

The following functions have been deprecated since OpenSSL 3.0, and can

be hidden entirely by defining OPENSSL_API_COMPAT with a suitable version value, see openssl_user_macros(7):

```
unsigned char *MD4(const unsigned char *d, unsigned long n, unsigned char *md);
```

```
int MD4_Init(MD4_CTX *c);
```

```
int MD4_Update(MD4_CTX *c, const void *data, unsigned long len);
```

```
int MD4_Final(unsigned char *md, MD4_CTX *c);
```

```
#include <openssl/md5.h>
```

The following functions have been deprecated since OpenSSL 3.0, and can be hidden entirely by defining OPENSSL_API_COMPAT with a suitable version value, see openssl_user_macros(7):

```
unsigned char *MD5(const unsigned char *d, unsigned long n, unsigned char *md);
```

```
int MD5_Init(MD5_CTX *c);
```

```
int MD5_Update(MD5_CTX *c, const void *data, unsigned long len);
```

```
int MD5_Final(unsigned char *md, MD5_CTX *c);
```

DESCRIPTION

All of the functions described on this page are deprecated.

Applications should instead use EVP_DigestInit_ex(3), EVP_DigestUpdate(3) and EVP_DigestFinal_ex(3).

MD2, MD4, and MD5 are cryptographic hash functions with a 128 bit output.

MD2(), MD4(), and MD5() compute the MD2, MD4, and MD5 message digest of the n bytes at d and place it in md (which must have space for

MD2_DIGEST_LENGTH == MD4_DIGEST_LENGTH == MD5_DIGEST_LENGTH == 16 bytes of output). If md is NULL, the digest is placed in a static array.

The following functions may be used if the message is not completely stored in memory:

MD2_Init() initializes a MD2_CTX structure.

MD2_Update() can be called repeatedly with chunks of the message to be hashed (len bytes at data).

MD2_Final() places the message digest in md, which must have space for MD2_DIGEST_LENGTH == 16 bytes of output, and erases the MD2_CTX.

MD4_Init(), MD4_Update(), MD4_Final(), MD5_Init(), MD5_Update(), and MD5_Final() are analogous using an MD4_CTX and MD5_CTX structure.

Applications should use the higher level functions EVP_DigestInit(3) etc. instead of calling the hash functions directly.

NOTE

MD2, MD4, and MD5 are recommended only for compatibility with existing applications. In new applications, SHA-1 or RIPEMD-160 should be preferred.

RETURN VALUES

MD2(), MD4(), and MD5() return pointers to the hash value.

MD2_Init(), MD2_Update(), MD2_Final(), MD4_Init(), MD4_Update(), MD4_Final(), MD5_Init(), MD5_Update(), and MD5_Final() return 1 for success, 0 otherwise.

CONFORMING TO

RFC 1319, RFC 1320, RFC 1321

SEE ALSO

EVP_DigestInit(3)

HISTORY

All of these functions were deprecated in OpenSSL 3.0.

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