

NAME

RIPEMD160, RIPEMD160_Init, RIPEMD160_Update, RIPEMD160_Final - RIPEMD-160 hash function

SYNOPSIS

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

unsigned char *RIPEMD160(const unsigned char *d, unsigned long n,
                          unsigned char *md);

int RIPEMD160_Init(RIPEMD160_CTX *c);
int RIPEMD160_Update(RIPEMD160_CTX *c, const void *data,
                    unsigned long len);
int RIPEMD160_Final(unsigned char *md, RIPEMD160_CTX *c);
```

DESCRIPTION

RIPEMD-160 is a cryptographic hash function with a 160 bit output.

RIPEMD160() computes the RIPEMD-160 message digest of the **n** bytes at **d** and places it in **md** (which must have space for RIPEMD160_DIGEST_LENGTH == 20 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:

RIPEMD160_Init() initializes a **RIPEMD160_CTX** structure.

RIPEMD160_Update() can be called repeatedly with chunks of the message to be hashed (**len** bytes at **data**).

RIPEMD160_Final() places the message digest in **md**, which must have space for RIPEMD160_DIGEST_LENGTH == 20 bytes of output, and erases the **RIPEMD160_CTX**.

RETURN VALUES

RIPEMD160() returns a pointer to the hash value.

RIPEMD160_Init(), *RIPEMD160_Update()* and *RIPEMD160_Final()* return 1 for success, 0 otherwise.

NOTE

Applications should use the higher level functions [EVP_DigestInit\(3\)](#) etc. instead of calling these functions directly.

CONFORMING TO

ISO/IEC 10118-3 (draft) (??)

SEE ALSO

[EVP_DigestInit\(3\)](#)

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