

**NAME**

EVP\_rc5\_32\_12\_16\_cbc, EVP\_rc5\_32\_12\_16\_cfb, EVP\_rc5\_32\_12\_16\_cfb64,  
EVP\_rc5\_32\_12\_16\_ecb, EVP\_rc5\_32\_12\_16\_ofb - EVP RC5 cipher

**SYNOPSIS**

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

```
const EVP_CIPHER *EVP_rc5_32_12_16_cbc(void);
const EVP_CIPHER *EVP_rc5_32_12_16_cfb(void);
const EVP_CIPHER *EVP_rc5_32_12_16_cfb64(void);
const EVP_CIPHER *EVP_rc5_32_12_16_ecb(void);
const EVP_CIPHER *EVP_rc5_32_12_16_ofb(void);
```

**DESCRIPTION**

The RC5 encryption algorithm for EVP.

**EVP\_rc5\_32\_12\_16\_cbc()**, **EVP\_rc5\_32\_12\_16\_cfb()**, **EVP\_rc5\_32\_12\_16\_cfb64()**,  
**EVP\_rc5\_32\_12\_16\_ecb()**, **EVP\_rc5\_32\_12\_16\_ofb()**

RC5 encryption algorithm in CBC, CFB, ECB and OFB modes respectively. This is a variable key length cipher with an additional "number of rounds" parameter. By default the key length is set to 128 bits and 12 rounds. Alternative key lengths can be set using

**EVP\_CIPHER\_CTX\_set\_key\_length(3)**. The maximum key length is 2040 bits.

The following rc5 specific *ctrls* are supported (see **EVP\_CIPHER\_CTX\_ctrl(3)**).

**EVP\_CIPHER\_CTX\_ctrl(ctx, EVP\_CTRL\_SET\_RC5\_ROUNDS, rounds, NULL)**  
Sets the number of rounds to **rounds**. This must be one of RC5\_8\_ROUNDS, RC5\_12\_ROUNDS or RC5\_16\_ROUNDS.

**EVP\_CIPHER\_CTX\_ctrl(ctx, EVP\_CTRL\_GET\_RC5\_ROUNDS, 0, &rounds)**  
Stores the number of rounds currently configured in **\*rounds** where **\*rounds** is an int.

**NOTES**

Developers should be aware of the negative performance implications of calling these functions multiple times and should consider using **EVP\_CIPHER\_fetch(3)** instead. See "Performance" in **crypto(7)** for further information.

**RETURN VALUES**

These functions return an **EVP\_CIPHER** structure that contains the implementation of the symmetric cipher. See **EVP\_CIPHER\_meth\_new(3)** for details of the **EVP\_CIPHER** structure.

**SEE ALSO**

**evp(7), EVP\_EncryptInit(3), EVP\_CIPHER\_meth\_new(3)**

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