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***Rocky Enterprise Linux 9.2 Manual Pages on command 'PKCS12\_add\_safe\_ex.3ossl'***

***\$ man PKCS12\_add\_safe\_ex.3ossl***

PKCS12\_ADD\_SAFE(3ossl)      OpenSSL      PKCS12\_ADD\_SAFE(3ossl)

**NAME**

PKCS12\_add\_safe, PKCS12\_add\_safe\_ex, PKCS12\_add\_safes,  
PKCS12\_add\_safes\_ex - Create and add objects to a PKCS#12 structure

**SYNOPSIS**

```
#include <openssl/pkcs12.h>
```

```
int PKCS12_add_safe(STACK_OF(PKCS7) **psafes, STACK_OF(PKCS12_SAFEBAG) *bags,  
                  int safe_nid, int iter, const char *pass);  
int PKCS12_add_safe_ex(STACK_OF(PKCS7) **psafes, STACK_OF(PKCS12_SAFEBAG) *bags,  
                      int safe_nid, int iter, const char *pass,  
                      OSSL_LIB_CTX *ctx, const char *propq);
```

```
PKCS12 *PKCS12_add_safes(STACK_OF(PKCS7) *safes, int p7_nid);
```

```
PKCS12 *PKCS12_add_safes_ex(STACK_OF(PKCS7) *safes, int p7_nid,  
                            OSSL_LIB_CTX *ctx, const char *propq);
```

## DESCRIPTION

PKCS12\_add\_safe() creates a new PKCS7 contentInfo containing the supplied PKCS12\_SAFE BAGs and adds this to a set of PKCS7 contentInfos.

Its type depends on the value of safe\_nid:

? If safe\_nid is -1, a plain PKCS7 data contentInfo is created.

? If safe\_nid is a valid PBE algorithm NID, a PKCS7 encryptedData contentInfo is created. The algorithm uses pass as the passphrase and iter as the iteration count. If iter is zero then a default value for iteration count of 2048 is used.

? If safe\_nid is 0, a PKCS7 encryptedData contentInfo is created using a default encryption algorithm, currently NID\_pbe\_WithSHA1And3\_Key\_TripleDES\_CBC.

PKCS12\_add\_safe\_ex() is identical to PKCS12\_add\_safe() but allows for a library context ctx and property query propq to be used to select algorithm implementations.

PKCS12\_add\_safes() creates a PKCS12 structure containing the supplied set of PKCS7 contentInfos. The safes are enclosed first within a PKCS7 contentInfo of type p7\_nid. Currently the only supported type is NID\_pkcs7\_data.

PKCS12\_add\_safes\_ex() is identical to PKCS12\_add\_safes() but allows for a library context ctx and property query propq to be used to select algorithm implementations.

## NOTES

PKCS12\_add\_safe() makes assumptions regarding the encoding of the given pass phrase. See passphrase-encoding(7) for more information.

## RETURN VALUES

PKCS12\_add\_safe() returns a value of 1 indicating success or 0 for failure.

PKCS12\_add\_safes() returns a valid PKCS12 structure or NULL if an error occurred.

## CONFORMING TO

IETF RFC 7292 (<<https://tools.ietf.org/html/rfc7292>>)

## SEE ALSO

PKCS12\_create(3)

## HISTORY

PKCS12\_add\_safe\_ex() and PKCS12\_add\_safes\_ex() were added in OpenSSL 3.0.

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