

**NAME**

EVP\_PKEY2PKCS8, EVP\_PKCS82PKEY\_ex, EVP\_PKCS82PKEY - Convert a private key to/from PKCS8

**SYNOPSIS**

```
#include <openssl/x509.h>
```

```
PKCS8_PRIV_KEY_INFO *EVP_PKEY2PKCS8(const EVP_PKEY *pkey);
EVP_PKEY *EVP_PKCS82PKEY(const PKCS8_PRIV_KEY_INFO *p8);
EVP_PKEY *EVP_PKCS82PKEY_ex(const PKCS8_PRIV_KEY_INFO *p8, OSSL_LIB_CTX *libctx,
                             const char *propq);
```

**DESCRIPTION**

**EVP\_PKEY2PKCS8()** converts a private key *pkey* into a returned PKCS8 object.

**EVP\_PKCS82PKEY\_ex()** converts a PKCS8 object *p8* into a returned private key. It uses *libctx* and *propq* when fetching algorithms.

**EVP\_PKCS82PKEY()** is similar to **EVP\_PKCS82PKEY\_ex()** but uses default values of NULL for the *libctx* and *propq*.

**RETURN VALUES**

**EVP\_PKEY2PKCS8()** returns a PKCS8 object on success. **EVP\_PKCS82PKEY()** and **EVP\_PKCS82PKEY\_ex()** return a private key on success.

All functions return NULL if the operation fails.

**SEE ALSO**

**PKCS8\_pkey\_add1\_attr(3)**,

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