

NAME

EVP_PKEY_todata, EVP_PKEY_export - functions to return keys as an array of key parameters

SYNOPSIS

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

```
int EVP_PKEY_todata(const EVP_PKEY *pkey, int selection, OSSL_PARAM **params);  
int EVP_PKEY_export(const EVP_PKEY *pkey, int selection,  
                    OSSL_CALLBACK *export_cb, void *export_cbarg);
```

DESCRIPTION

The functions described here are used to extract **EVP_PKEY** key values as an array of **OSSL_PARAM(3)**.

EVP_PKEY_todata() extracts values from a key *pkey* using the *selection*. *selection* is described in "Selections" in **EVP_PKEY_fromdata(3)**. **OSSL_PARAM_free(3)** should be used to free the returned parameters in **params*.

EVP_PKEY_export() is similar to **EVP_PKEY_todata()** but uses a callback *export_cb* that gets passed the value of *export_cbarg*. See **openssl-core.h(7)** for more information about the callback. Note that the **OSSL_PARAM(3)** array that is passed to the callback is not persistent after the callback returns. The user must preserve the items of interest, or use **EVP_PKEY_todata()** if persistence is required.

NOTES

These functions only work with key management methods coming from a provider. This is the mirror function to **EVP_PKEY_fromdata(3)**.

RETURN VALUES

EVP_PKEY_todata() and **EVP_PKEY_export()** return 1 for success and 0 for failure.

SEE ALSO

OSSL_PARAM(3), **openssl-core.h(7)**, **EVP_PKEY_fromdata(3)**, **EVP_PKEY-RSA(7)**, **EVP_PKEY-DSA(7)**, **EVP_PKEY-DH(7)**, **EVP_PKEY-EC(7)**, **EVP_PKEY-ED448(7)**, **EVP_PKEY-X25519(7)**, **EVP_PKEY-X448(7)**, **EVP_PKEY-ED25519(7)**

HISTORY

These functions were added in OpenSSL 3.0.

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