

**NAME**

EVP\_PKEY\_settable\_params, EVP\_PKEY\_set\_params, EVP\_PKEY\_set\_int\_param,  
 EVP\_PKEY\_set\_size\_t\_param, EVP\_PKEY\_set\_bn\_param, EVP\_PKEY\_set\_utf8\_string\_param,  
 EVP\_PKEY\_set\_octet\_string\_param - set key parameters into a key

**SYNOPSIS**

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

```
const OSSL_PARAM *EVP_PKEY_settable_params(const EVP_PKEY *pkey);
int EVP_PKEY_set_params(EVP_PKEY *pkey, OSSL_PARAM params[]);
int EVP_PKEY_set_int_param(EVP_PKEY *pkey, const char *key_name, int in);
int EVP_PKEY_set_size_t_param(EVP_PKEY *pkey, const char *key_name, size_t in);
int EVP_PKEY_set_bn_param(EVP_PKEY *pkey, const char *key_name,
                          const BIGNUM *bn);
int EVP_PKEY_set_utf8_string_param(EVP_PKEY *pkey, const char *key_name,
                                   const char *str);
int EVP_PKEY_set_octet_string_param(EVP_PKEY *pkey, const char *key_name,
                                    const unsigned char *buf, size_t bsize);
```

**DESCRIPTION**

These functions can be used to set additional parameters into an existing **EVP\_PKEY**.

**EVP\_PKEY\_set\_params()** sets one or more *params* into a *pkey*. See **OSSL\_PARAM(3)** for information about parameters.

**EVP\_PKEY\_settable\_params()** returns a constant list of *params* indicating the names and types of key parameters that can be set. See **OSSL\_PARAM(3)** for information about parameters.

**EVP\_PKEY\_set\_int\_param()** sets an integer value *in* into a key *pkey* for the associated field *key\_name*.

**EVP\_PKEY\_set\_size\_t\_param()** sets an *size\_t* value *in* into a key *pkey* for the associated field *key\_name*.

**EVP\_PKEY\_set\_bn\_param()** sets the **BIGNUM** value *bn* into a key *pkey* for the associated field *key\_name*.

**EVP\_PKEY\_set\_utf8\_string\_param()** sets the UTF8 string *str* into a key *pkey* for the associated field *key\_name*.

**EVP\_PKEY\_set\_octet\_string\_param()** sets the octet string value *buf* with a size *bsize* into a key *pkey* for the associated field *key\_name*.

## NOTES

These functions only work for **EVP\_PKEY**s that contain a provider side key.

## RETURN VALUES

**EVP\_PKEY\_settable\_params()** returns NULL on error or if it is not supported,

All other methods return 1 if a value was successfully set, or 0 if there was an error.

## SEE ALSO

**EVP\_PKEY\_gettable\_params(3)**, **EVP\_PKEY\_CTX\_new(3)**, **provider-keymgmt(7)**,  
**OSSL\_PARAM(3)**,

## HISTORY

These functions were added in OpenSSL 3.0.

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