

**NAME**

EVP\_PKEY\_get\_field\_type, EVP\_PKEY\_get\_ec\_point\_conv\_form - get field type or point conversion form of a key

**SYNOPSIS**

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

```
int EVP_PKEY_get_field_type(const EVP_PKEY *pkey);  
int EVP_PKEY_get_ec_point_conv_form(const EVP_PKEY *pkey);
```

**DESCRIPTION**

**EVP\_PKEY\_get\_field\_type()** returns the field type NID of the *pkey*, if *pkey*'s key type supports it. The types currently supported by the built-in OpenSSL providers are either **NID\_X9\_62\_prime\_field** for prime curves or **NID\_X9\_62\_characteristic\_two\_field** for binary curves; these values are defined in the *<openssl/obj\_mac.h>* header file.

**EVP\_PKEY\_get\_ec\_point\_conv\_form()** returns the point conversion format of the *pkey*, if *pkey*'s key type supports it.

**NOTES**

Among the standard OpenSSL key types, this is only supported for EC and SM2 keys. Other providers may support this for additional key types.

**RETURN VALUES**

**EVP\_PKEY\_get\_field\_type()** returns the field type NID or 0 on error.

**EVP\_PKEY\_get\_ec\_point\_conv\_form()** returns the point conversion format number (see **EC\_GROUP\_copy(3)**) or 0 on error.

**SEE ALSO**

**EC\_GROUP\_copy(3)**

**HISTORY**

These functions were added in OpenSSL 3.0.

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