

**NAME**

EC\_KEY\_get\_enc\_flags, EC\_KEY\_set\_enc\_flags - Get and set flags for encoding EC\_KEY structures

**SYNOPSIS**

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

```
unsigned int EC_KEY_get_enc_flags(const EC_KEY *key);  
void EC_KEY_set_enc_flags(EC_KEY *eckey, unsigned int flags);
```

**DESCRIPTION**

The format of the external representation of the public key written by **i2d\_ECPrivateKey()** (such as whether it is stored in a compressed form or not) is described by the `point_conversion_form`. See **EC\_GROUP\_copy(3)** for a description of `point_conversion_form`.

When reading a private key encoded without an associated public key (e.g. if `EC_PKEY_NO_PUBKEY` has been used - see below), then **d2i\_ECPrivateKey()** generates the missing public key automatically. Private keys encoded without parameters (e.g. if `EC_PKEY_NO_PARAMETERS` has been used - see below) cannot be loaded using **d2i\_ECPrivateKey()**.

The functions **EC\_KEY\_get\_enc\_flags()** and **EC\_KEY\_set\_enc\_flags()** get and set the value of the encoding flags for the **key**. There are two encoding flags currently defined - `EC_PKEY_NO_PARAMETERS` and `EC_PKEY_NO_PUBKEY`. These flags define the behaviour of how the **key** is converted into ASN1 in a call to **i2d\_ECPrivateKey()**. If `EC_PKEY_NO_PARAMETERS` is set then the public parameters for the curve are not encoded along with the private key. If `EC_PKEY_NO_PUBKEY` is set then the public key is not encoded along with the private key.

**RETURN VALUES**

**EC\_KEY\_get\_enc\_flags()** returns the value of the current encoding flags for the **EC\_KEY**.

**SEE ALSO**

**crypto(7)**, **EC\_GROUP\_new(3)**, **EC\_GROUP\_copy(3)**, **EC\_POINT\_new(3)**, **EC\_POINT\_add(3)**, **EC\_GFp\_simple\_method(3)**, **d2i\_ECPKParameters(3)**, **d2i\_ECPrivateKey(3)**

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