

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)

COPYRIGHT

Copyright 2015–2017 The OpenSSL Project Authors. All Rights Reserved.

Licensed under the Apache License 2.0 (the "License"). You may not use this file except in compliance with the License. You can obtain a copy in the file `LICENSE` in the source distribution or at [<https://www.openssl.org/source/license.html>](https://www.openssl.org/source/license.html).