NAME

PKCS12_SAFEBAG_get0_attr, PKCS12_SAFEBAG_get0_type, PKCS12_SAFEBAG_get_nid,
PKCS12_SAFEBAG_get_bag_nid, PKCS12_SAFEBAG_get0_bag_obj,
PKCS12_SAFEBAG_get0_bag_type, PKCS12_SAFEBAG_get1_cert, PKCS12_SAFEBAG_get1_crl,
PKCS12_SAFEBAG_get0_safes, PKCS12_SAFEBAG_get0_p8inf, PKCS12_SAFEBAG_get0_pkcs8
- Get objects from a PKCS#12 safeBag

SYNOPSIS

```
#include <openssl/pkcs12.h>

const ASN1_TYPE *PKCS12_SAFEBAG_get0_attr(const PKCS12_SAFEBAG *bag,
                        int attr_nid);
const ASN1_OBJECT *PKCS12_SAFEBAG_get0_type(const PKCS12_SAFEBAG *bag);
int PKCS12_SAFEBAG_get_nid(const PKCS12_SAFEBAG *bag);
int PKCS12_SAFEBAG_get_bag_nid(const PKCS12_SAFEBAG *bag);
const ASN1_TYPE *PKCS12_SAFEBAG_get0_bag_obj(const PKCS12_SAFEBAG *bag);
const ASN1_OBJECT *PKCS12_SAFEBAG_get0_bag_type(const PKCS12_SAFEBAG *bag);
X509 *PKCS12_SAFEBAG_get1_cert(const PKCS12_SAFEBAG *bag);
X509_CRL *PKCS12_SAFEBAG_get1_crl(const PKCS12_SAFEBAG *bag);
const STACK_OF(PKCS12_SAFEBAG) *PKCS12_SAFEBAG_get0_safes(const PKCS12_SAFEBAG *bag);
const PKCS8_PRIV_KEY_INFO *PKCS12_SAFEBAG_get0_p8inf(const PKCS12_SAFEBAG *bag);
const X509_SIG *PKCS12_SAFEBAG_get0_pkcs8(const PKCS12_SAFEBAG *bag);
```

DESCRIPTION

PKCS12_SAFEBAG_get0_attr() gets the attribute value corresponding to the **attr_nid**.

PKCS12_SAFEBAG_get0_type() gets the **safeBag** type as an OID, whereas
PKCS12_SAFEBAG_get_nid() gets the **safeBag** type as an NID, which could be **NID_certBag**,
NID_crlBag, **NID_keyBag**, **NID_secretBag**, **NID_safeContentsBag** or **NID_pkcs8ShroudedKeyBag**.

PKCS12_SAFEBAG_get_bag_nid() gets the type of the object contained within the
PKCS12_SAFEBAG. This corresponds to the bag type for most bags, but can be arbitrary for
secretBags. **PKCS12_SAFEBAG_get0_bag_type()** gets this type as an OID.

PKCS12_SAFEBAG_get0_bag_obj() retrieves the object contained within the safeBag.

PKCS12_SAFEBAG_get1_cert() and **PKCS12_SAFEBAG_get1_crl()** return new **X509** or **X509_CRL**
objects from the item in the safeBag.

PKCS12_SAFEBAG_get0_p8inf() and **PKCS12_SAFEBAG_get0_pkcs8()** return the PKCS8 object

from a PKCS8shroudedKeyBag or a keyBag.

PKCS12_SAFEBAG_get0_safes() retrieves the set of **safeBags** contained within a safeContentsBag.

RETURN VALUES

PKCS12_SAFEBAG_get_nid() and **PKCS12_SAFEBAG_get_bag_nid()** return the NID of the safeBag or bag object, or -1 if there is no corresponding NID. Other functions return a valid object of the specified type or NULL if an error occurred.

SEE ALSO

PKCS12_create(3), **PKCS12_add_safe**(3), **PKCS12_add_safes**(3)

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