



***Rocky Enterprise Linux 9.2 Manual Pages on command 'EVP\_PKEY\_asn1\_get0.3ossl'***

***\$ man EVP\_PKEY\_asn1\_get0.3ossl***

EVP\_PKEY\_ASN1\_GET\_COUNT(3ossl)    OpenSSL    EVP\_PKEY\_ASN1\_GET\_COUNT(3ossl)

**NAME**

EVP\_PKEY\_asn1\_find, EVP\_PKEY\_asn1\_find\_str, EVP\_PKEY\_asn1\_get\_count,  
EVP\_PKEY\_asn1\_get0, EVP\_PKEY\_asn1\_get0\_info - enumerate public key  
ASN.1 methods

**SYNOPSIS**

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

```
int EVP_PKEY_asn1_get_count(void);
```

```
const EVP_PKEY_ASN1_METHOD *EVP_PKEY_asn1_get0(int idx);
```

```
const EVP_PKEY_ASN1_METHOD *EVP_PKEY_asn1_find(ENGINE **pe, int type);
```

```
const EVP_PKEY_ASN1_METHOD *EVP_PKEY_asn1_find_str(ENGINE **pe,  
                                                    const char *str, int len);
```

```
int EVP_PKEY_asn1_get0_info(int *ppkey_id, int *pkey_base_id,
```

```
int *ppkey_flags, const char **pinfo,
```

```
const char **ppem_str,
```

```
const EVP_PKEY_ASN1_METHOD *ameth);
```

## DESCRIPTION

`EVP_PKEY_asn1_count()` returns a count of the number of public key ASN.1 methods available: it includes standard methods and any methods added by the application.

`EVP_PKEY_asn1_get0()` returns the public key ASN.1 method idx. The value of idx must be between zero and `EVP_PKEY_asn1_get_count() - 1`.

`EVP_PKEY_asn1_find()` looks up the `EVP_PKEY_ASN1_METHOD` with NID type. If `pe` isn't NULL, then it will look up an engine implementing a `EVP_PKEY_ASN1_METHOD` for the NID type and return that instead, and also set `*pe` to point at the engine that implements it.

`EVP_PKEY_asn1_find_str()` looks up the `EVP_PKEY_ASN1_METHOD` with PEM type string `str`. Just like `EVP_PKEY_asn1_find()`, if `pe` isn't NULL, then it will look up an engine implementing a `EVP_PKEY_ASN1_METHOD` for the NID type and return that instead, and also set `*pe` to point at the engine that implements it.

`EVP_PKEY_asn1_get0_info()` returns the public key ID, base public key ID (both NIDs), any flags, the method description and PEM type string associated with the public key ASN.1 method `*ameth`.

`EVP_PKEY_asn1_count()`, `EVP_PKEY_asn1_get0()`, `EVP_PKEY_asn1_find()` and `EVP_PKEY_asn1_find_str()` are not thread safe, but as long as all `EVP_PKEY_ASN1_METHOD` objects are added before the application gets threaded, using them is safe. See `EVP_PKEY_asn1_add0(3)`.

## RETURN VALUES

`EVP_PKEY_asn1_count()` returns the number of available public key methods.

EVP\_PKEY\_asn1\_get0() return a public key method or NULL if idx is out of range.

EVP\_PKEY\_asn1\_get0\_info() returns 0 on failure, 1 on success.

#### SEE ALSO

EVP\_PKEY\_asn1\_new(3), EVP\_PKEY\_asn1\_add0(3)

#### COPYRIGHT

Copyright 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>.

3.0.7                    2023-07-13    EVP\_PKEY\_ASN1\_GET\_COUNT(3openssl)