

**NAME**

RSA\_print, RSA\_print\_fp, DSAParams\_print, DSAParams\_print\_fp, DSA\_print, DSA\_print\_fp, DHparams\_print, DHparams\_print\_fp - print cryptographic parameters

**SYNOPSIS**

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

The following functions have been deprecated since OpenSSL 3.0, and can be hidden entirely by defining **OPENSSL\_API\_COMPAT** with a suitable version value, see **openssl\_user\_macros(7)**:

```
int RSA_print(BIO *bp, const RSA *x, int offset);
int RSA_print_fp(FILE *fp, const RSA *x, int offset);
```

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

The following functions have been deprecated since OpenSSL 3.0, and can be hidden entirely by defining **OPENSSL\_API\_COMPAT** with a suitable version value, see **openssl\_user\_macros(7)**:

```
int DSAParams_print(BIO *bp, const DSA *x);
int DSAParams_print_fp(FILE *fp, const DSA *x);
int DSA_print(BIO *bp, const DSA *x, int offset);
int DSA_print_fp(FILE *fp, const DSA *x, int offset);
```

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

The following functions have been deprecated since OpenSSL 3.0, and can be hidden entirely by defining **OPENSSL\_API\_COMPAT** with a suitable version value, see **openssl\_user\_macros(7)**:

```
int DHparams_print(BIO *bp, DH *x);
int DHparams_print_fp(FILE *fp, const DH *x);
```

**DESCRIPTION**

All of the functions described on this page are deprecated. Applications should instead use **EVP\_PKEY\_print\_params(3)** and **EVP\_PKEY\_print\_private(3)**.

A human-readable hexadecimal output of the components of the RSA key, DSA parameters or key or DH parameters is printed to **bp** or **fp**.

The output lines are indented by **offset** spaces.

**RETURN VALUES**

**DSAparams\_print()**, **DSAparams\_print\_fp()**, **DSA\_print()**, and **DSA\_print\_fp()** return 1 for success and 0 or a negative value for failure.

**DHparams\_print()** and **DHparams\_print\_fp()** return 1 on success, 0 on error.

**SEE ALSO**

L<EVP\_PKEY\_print\_params(3)>,

L<EVP\_PKEY\_print\_private(3)>,

L<BN\_bn2bin(3)>

**HISTORY**

All of these functions were deprecated in OpenSSL 3.0.

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