

NAME

DH_size, DH_bits, DH_security_bits - get Diffie-Hellman prime size and security bits

SYNOPSIS

```
#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 DH_bits(const DH *dh);
```

```
int DH_size(const DH *dh);
```

```
int DH_security_bits(const DH *dh);
```

DESCRIPTION

The functions described on this page are deprecated. Applications should instead use **EVP_PKEY_get_bits(3)**, **EVP_PKEY_get_security_bits(3)** and **EVP_PKEY_get_size(3)**.

DH_bits() returns the number of significant bits.

dh and **dh->p** must not be **NULL**.

DH_size() returns the Diffie-Hellman prime size in bytes. It can be used to determine how much memory must be allocated for the shared secret computed by **DH_compute_key(3)**.

DH_security_bits() returns the number of security bits of the given **dh** key. See **BN_security_bits(3)**.

RETURN VALUES

DH_bits() returns the number of bits in the key, or -1 if **dh** doesn't hold any key parameters.

DH_size() returns the prime size of Diffie-Hellman in bytes, or -1 if **dh** doesn't hold any key parameters.

DH_security_bits() returns the number of security bits, or -1 if **dh** doesn't hold any key parameters.

SEE ALSO

EVP_PKEY_get_bits(3), **DH_new(3)**, **DH_generate_key(3)**, **BN_num_bits(3)**

HISTORY

All functions were deprecated in OpenSSL 3.0.

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