

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.

COPYRIGHT

Copyright 2000–2021 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).