

**NAME**

DH\_new\_by\_nid, DH\_get\_nid - create or get DH named parameters

**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)**:

```
DH *DH_new_by_nid(int nid);
```

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

**DESCRIPTION**

**DH\_new\_by\_nid()** creates and returns a DH structure containing named parameters **nid**. Currently **nid** must be **NID\_ffdhe2048**, **NID\_ffdhe3072**, **NID\_ffdhe4096**, **NID\_ffdhe6144**, **NID\_ffdhe8192**, **NID\_modp\_1536**, **NID\_modp\_2048**, **NID\_modp\_3072**, **NID\_modp\_4096**, **NID\_modp\_6144** or **NID\_modp\_8192**.

**DH\_get\_nid()** determines if the parameters contained in **dh** match any named safe prime group. It returns the NID corresponding to the matching parameters or **NID\_undef** if there is no match. This function is deprecated.

**RETURN VALUES**

**DH\_new\_by\_nid()** returns a set of DH parameters or **NULL** if an error occurred.

**DH\_get\_nid()** returns the NID of the matching set of parameters for p and g and optionally q, otherwise it returns **NID\_undef** if there is no match.

**HISTORY**

All of these functions were deprecated in OpenSSL 3.0.

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