

NAME

BN_zero, BN_one, BN_value_one, BN_set_word, BN_get_word - BIGNUM assignment operations

SYNOPSIS

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

```
void BN_zero(BIGNUM *a);
```

```
int BN_one(BIGNUM *a);
```

```
const BIGNUM *BN_value_one(void);
```

```
int BN_set_word(BIGNUM *a, BN_ULONG w);
```

```
unsigned BN_ULONG BN_get_word(BIGNUM *a);
```

DESCRIPTION

BN_ULONG is a macro that will be an unsigned integral type optimized for the most efficient implementation on the local platform.

BN_zero(), **BN_one()** and **BN_set_word()** set **a** to the values 0, 1 and **w** respectively. **BN_zero()** and **BN_one()** are macros.

BN_value_one() returns a **BIGNUM** constant of value 1. This constant is useful for use in comparisons and assignment.

BN_get_word() returns **a**, if it can be represented as a **BN_ULONG**.

RETURN VALUES

BN_get_word() returns the value **a**, or all-bits-set if **a** cannot be represented as a single integer.

BN_one() and **BN_set_word()** return 1 on success, 0 otherwise. **BN_value_one()** returns the constant. **BN_zero()** never fails and returns no value.

BUGS

If a **BIGNUM** is equal to the value of all-bits-set, it will collide with the error condition returned by **BN_get_word()** which uses that as an error value.

BN_ULONG should probably be a typedef.

SEE ALSO

BN_bn2bin(3)

HISTORY

In OpenSSL 0.9.8, **BN_zero()** was changed to not return a value; previous versions returned an int.

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