

**NAME**

BN\_zero, BN\_one, BN\_value\_one, BN\_set\_word, BN\_get\_word - BIGNUM assignment operations

**SYNOPSIS**

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

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

const BIGNUM *BN_value_one(void);

int BN_set_word(BIGNUM *a, unsigned long w);
unsigned long BN_get_word(BIGNUM *a);
```

**DESCRIPTION**

*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 an unsigned long.

**RETURN VALUES**

*BN\_get\_word()* returns the value **a**, and 0xffffffffL if **a** cannot be represented as an unsigned long.

*BN\_zero()*, *BN\_one()* and *BN\_set\_word()* return 1 on success, 0 otherwise. *BN\_value\_one()* returns the constant.

**BUGS**

Someone might change the constant.

If a **BIGNUM** is equal to 0xffffffffL it can be represented as an unsigned long but this value is also returned on error.

**SEE ALSO**

[bn\(3\)](#), [BN\\_bn2bin\(3\)](#)

**HISTORY**

*BN\_zero()*, *BN\_one()* and *BN\_set\_word()* are available in all versions of SSLeay and OpenSSL. *BN\_value\_one()* and *BN\_get\_word()* were added in SSLeay 0.8.

*BN\_value\_one()* was changed to return a true const BIGNUM \* in OpenSSL 0.9.7.