

**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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