



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'BN_zero.3ossl' command

\$ man BN_zero.3ossl

BN_ZERO(3ossl) OpenSSL BN_ZERO(3ossl)

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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