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## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'BN\_get\_word.3ossl' command**

**\$ man BN\_get\_word.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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