



*Full credit is given to the above companies including the OS that this PDF file was generated!*

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

***\$ man BN\_CTX\_start.3ossl***

BN\_CTX\_START(3ossl)            OpenSSL            BN\_CTX\_START(3ossl)

### NAME

BN\_CTX\_start, BN\_CTX\_get, BN\_CTX\_end - use temporary BIGNUM variables

### SYNOPSIS

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

```
void BN_CTX_start(BN_CTX *ctx);
```

```
BIGNUM *BN_CTX_get(BN_CTX *ctx);
```

```
void BN_CTX_end(BN_CTX *ctx);
```

### DESCRIPTION

These functions are used to obtain temporary BIGNUM variables from a BN\_CTX (which can be created by using BN\_CTX\_new(3)) in order to save the overhead of repeatedly creating and freeing BIGNUMs in functions that are called from inside a loop.

A function must call BN\_CTX\_start() first. Then, BN\_CTX\_get() may be called repeatedly to obtain temporary BIGNUMs. All BN\_CTX\_get() calls must be made before calling any other functions that use the ctx as an

argument.

Finally, `BN_CTX_end()` must be called before returning from the function. If `ctx` is `NULL`, nothing is done. When `BN_CTX_end()` is called, the `BIGNUM` pointers obtained from `BN_CTX_get()` become invalid.

## RETURN VALUES

`BN_CTX_start()` and `BN_CTX_end()` return no values.

`BN_CTX_get()` returns a pointer to the `BIGNUM`, or `NULL` on error. Once `BN_CTX_get()` has failed, the subsequent calls will return `NULL` as well, so it is sufficient to check the return value of the last `BN_CTX_get()` call. In case of an error, an error code is set, which can be obtained by `ERR_get_error(3)`.

## SEE ALSO

`BN_CTX_new(3)`

## COPYRIGHT

Copyright 2000-2016 The OpenSSL Project Authors. All Rights Reserved.

Licensed under the Apache License 2.0 (the "License"). You may not use this file except in compliance with the License. You can obtain a copy in the file `LICENSE` in the source distribution or at <https://www.openssl.org/source/license.html>.