



## ***Red Hat Enterprise Linux Release 9.2 Manual Pages on 'OPENSSL\_gmtime\_diff.3oss!' command***

***\$ man OPENSSL\_gmtime\_diff.3oss!***

OPENSSL\_GMTIME(3oss)      OpenSSL      OPENSSL\_GMTIME(3oss)

### NAME

OPENSSL\_gmtime, OPENSSL\_gmtime\_adj, OPENSSL\_gmtime\_diff -  
platform-agnostic OpenSSL time routines

### SYNOPSIS

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

```
struct tm *OPENSSL_gmtime(const time_t *timer, struct tm *result);  
int OPENSSL_gmtime_adj(struct tm *tm, int offset_day, long offset_sec);  
int OPENSSL_gmtime_diff(int *pday, int *psec,  
                        const struct tm *from, const struct tm *to);
```

### DESCRIPTION

OPENSSL\_gmtime() returns the UTC time specified by timer into the provided result argument.

OPENSSL\_gmtime\_adj() adds the offsets in offset\_day and offset\_sec to tm.

OPENSSL\_gmtime\_diff() calculates the difference between from and to.

## NOTES

It is an error to call `OPENSSL_gmtime()` with result equal to `NULL`. The contents of the `time_t` given by `timer` are stored into the result. Calling with `timer` equal to `NULL` means use the current time.

`OPENSSL_gmtime_adj()` converts `tm` into a days and seconds value, adds the offsets, then converts back into a struct `tm` specified by `tm`. Leap seconds are not considered.

`OPENSSL_gmtime_diff()` calculates the difference between the two struct `tm` structures `from` and `to`. The difference in days is placed into `*pday`, the remaining seconds are placed to `*psec`. The value in `*psec` will be less than the number of seconds per day (3600). Leap seconds are not considered.

## RETURN VALUES

`OPENSSL_gmtime()` returns `NULL` on error, or result on success.

`OPENSSL_gmtime_adj()` and `OPENSSL_gmtime_diff()` return 0 on error, and 1 on success.

## HISTORY

`OPENSSL_gmtime()`, `OPENSSL_gmtime_adj()` and `OPENSSL_gmtime_diff()` have been in OpenSSL since 1.0.0.

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