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## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'OPENSSL\_fork\_parent.3oss1' command**

**\$ man OPENSSL\_fork\_parent.3oss1**

OPENSSL\_FORK\_PREPARE(3oss1)    OpenSSL    OPENSSL\_FORK\_PREPARE(3oss1)

### NAME

OPENSSL\_fork\_prepare, OPENSSL\_fork\_parent, OPENSSL\_fork\_child - OpenSSL  
fork handlers

### SYNOPSIS

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

The following functions have been deprecated since OpenSSL 3.0, and can be hidden entirely by defining OPENSSL\_API\_COMPAT with a suitable version value, see openssl\_user\_macros(7):

```
void OPENSSL_fork_prepare(void);
```

```
void OPENSSL_fork_parent(void);
```

```
void OPENSSL_fork_child(void);
```

### DESCRIPTION

These methods are currently unused, and as such, no replacement methods are required or planned.

OpenSSL has state that should be reset when a process forks. For example, the entropy pool used to generate random numbers (and therefore encryption keys) should not be shared across multiple programs. The OPENSSL\_fork\_prepare(), OPENSSL\_fork\_parent(), and OPENSSL\_fork\_child() functions are used to reset this internal state.

Platforms without fork(2) will probably not need to use these functions. Platforms with fork(2) but without pthread\_atfork(3) will probably need to call them manually, as described in the following

paragraph. Platforms such as Linux that have both functions will normally not need to call these functions as the OpenSSL library will do so automatically.

OPENSSL\_init\_crypto(3) will register these functions with the appropriate handler, when the OPENSSL\_INIT\_ATFORK flag is used. For other applications, these functions can be called directly. They should be used according to the calling sequence described by the pthread\_atfork(3) documentation, which is summarized here.

OPENSSL\_fork\_prepare() should be called before a fork() is done. After the fork() returns, the parent process should call OPENSSL\_fork\_parent() and the child process should call OPENSSL\_fork\_child().

#### RETURN VALUES

OPENSSL\_fork\_prepare(), OPENSSL\_fork\_parent() and OPENSSL\_fork\_child() do not return values.

#### SEE ALSO

OPENSSL\_init\_crypto(3)

#### HISTORY

These functions were added in OpenSSL 1.1.1.

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