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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