

Adding new libraries

When adding a new sub-library to OpenSSL, assign it a library number `ERR_LIB_XXX`, define a macro `XXXerr()` (both in `err.h`), add its name to `ERR_str_libraries[]` (in `crypto/err/err.c`), and add `ERR_load_XXX_strings()` to the `ERR_load_crypto_strings()` function (in `crypto/err/err_all.c`). Finally, add an entry:

```
L      XXX      xxx.h      xxx_err.c
```

to `crypto/err/openssl.ec`, and add `xxx_err.c` to the Makefile. Running `make errors` will then generate a file `xxx_err.c`, and add all error codes used in the library to `xxx.h`.

Additionally the library include file must have a certain form. Typically it will initially look like this:

```
#ifndef HEADER_XXX_H
#define HEADER_XXX_H

#ifdef __cplusplus
extern "C" {
#endif

/* Include files */

#include <openssl/bio.h>
#include <openssl/x509.h>

/* Macros, structures and function prototypes */

/* BEGIN ERROR CODES */
```

The `BEGIN ERROR CODES` sequence is used by the error code generation script as the point to place new error codes, any text after this point will be overwritten when `make errors` is run. The closing `#endif` etc will be automatically added by the script.

The generated C error code file `xxx_err.c` will load the header files `stdio.h`, `openssl/err.h` and `openssl/xxx.h` so the header file must load any additional header files containing any definitions it uses.