

**NAME**

PCRE - Perl-compatible regular expressions

**SYNOPSIS**

```
#include <pcre.h>

pcre *pcre_compile2(const char *pattern, int options,
    int *errorcodeptr,
    const char **errptr, int *erroffset,
    const unsigned char *tableptr);

pcre16 *pcre16_compile2(PCRE_SPTR16 pattern, int options,
    int *errorcodeptr,
    const char **errptr, int *erroffset,
    const unsigned char *tableptr);

pcre32 *pcre32_compile2(PCRE_SPTR32 pattern, int options,
    int *errorcodeptr,
    const char **errptr, int *erroffset,
    const unsigned char *tableptr);
```

**DESCRIPTION**

This function compiles a regular expression into an internal form. It is the same as **pcre[16|32]\_compile()**, except for the addition of the *errorcodeptr* argument. The arguments are:

*pattern*     A zero-terminated string containing the  
              regular expression to be compiled  
*options*     Zero or more option bits  
*errorcodeptr* Where to put an error code  
*errptr*      Where to put an error message  
*erroffset*   Offset in pattern where error was found  
*tableptr*    Pointer to character tables, or NULL to  
              use the built-in default

The option bits are:

PCRE_ANCHORED	Force pattern anchoring
PCRE_AUTO_CALLOUT	Compile automatic callouts
PCRE_BSR_ANYCRLF	\R matches only CR, LF, or CRLF
PCRE_BSR_UNICODE	\R matches all Unicode line endings
PCRE_CASELESS	Do caseless matching
PCRE_DOLLAR_ENDONLY	\$ not to match newline at end
PCRE_DOTALL	. matches anything including NL
PCRE_DUPNAMES	Allow duplicate names for subpatterns
PCRE_EXTENDED	Ignore white space and # comments
PCRE_EXTRA	PCRE extra features (not much use currently)
PCRE_FIRSTLINE	Force matching to be before newline
PCRE_JAVASCRIPT_COMPAT	JavaScript compatibility
PCRE_MULTILINE	^ and \$ match newlines within data
PCRE_NEVER_UTF	Lock out UTF, e.g. via (*UTF)
PCRE_NEWLINE_ANY	Recognize any Unicode newline sequence
PCRE_NEWLINE_ANYCRLF	Recognize CR, LF, and CRLF as newline sequences

PCRE\_NEWLINE\_CR      Set CR as the newline sequence  
 PCRE\_NEWLINE\_CRLF    Set CRLF as the newline sequence  
 PCRE\_NEWLINE\_LF      Set LF as the newline sequence  
 PCRE\_NO\_AUTO\_CAPTURE   Disable numbered capturing paren-  
                                  theses (named ones available)  
 PCRE\_NO\_AUTO\_POSSESS   Disable auto-possessification  
 PCRE\_NO\_START\_OPTIMIZE   Disable match-time start optimizations  
 PCRE\_NO\_UTF16\_CHECK   Do not check the pattern for UTF-16  
                                  validity (only relevant if  
                                  PCRE\_UTF16 is set)  
 PCRE\_NO\_UTF32\_CHECK   Do not check the pattern for UTF-32  
                                  validity (only relevant if  
                                  PCRE\_UTF32 is set)  
 PCRE\_NO\_UTF8\_CHECK    Do not check the pattern for UTF-8  
                                  validity (only relevant if  
                                  PCRE\_UTF8 is set)  
 PCRE\_UCP              Use Unicode properties for \d, \w, etc.  
 PCRE\_UNGREEDY        Invert greediness of quantifiers  
 PCRE\_UTF16            Run **pcr e16\_compile()** in UTF-16 mode  
 PCRE\_UTF32            Run **pcr e32\_compile()** in UTF-32 mode  
 PCRE\_UTF8             Run **pcr e\_compile()** in UTF-8 mode

PCRE must be built with UTF support in order to use PCRE\_UTF8/16/32 and PCRE\_NO\_UTF8/16/32\_CHECK, and with UCP support if PCRE\_UCP is used.

The yield of the function is a pointer to a private data structure that contains the compiled pattern, or NULL if an error was detected. Note that compiling regular expressions with one version of PCRE for use with a different version is not guaranteed to work and may cause crashes.

There is a complete description of the PCRE native API in the **pcreapi** page and a description of the POSIX API in the **pcreposix** page.