

NAME

PCRE - Perl-compatible regular expressions

SYNOPSIS

```
#include <pcre.h>
```

```
pcre *pcre_compile(const char *pattern, int options,
    const char **errptr, int *erroffset,
    const unsigned char *tableptr);
```

```
pcre16 *pcre16_compile(PCRE_SPTR16 pattern, int options,
    const char **errptr, int *erroffset,
    const unsigned char *tableptr);
```

```
pcre32 *pcre32_compile(PCRE_SPTR32 pattern, int options,
    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]_compile2()**, except for the absence of the *errorcodeptr* argument. Its arguments are:

pattern A zero-terminated string containing the
 regular expression to be compiled
options Zero or more option bits
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 in **pcr e16_compile()** UTF-16 mode

PCRE_UTF32 Run in **pcr e32_compile()** UTF-32 mode

PCRE_UTF8 Run in **pcr e_compile()** 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.