NAME

PCRE - Perl-compatible regular expressions

SYNOPSIS

#include <pcre.h>

DESCRIPTION

This function matches a compiled regular expression against a given subject string, using a matching algorithm that is similar to Perl's. It returns offsets to captured substrings. Its arguments are:

code	Points to the compiled pattern
extra	Points to an associated pcre[16 32]_extra structure,
	or is NULL
subject	Points to the subject string
length	Length of the subject string
startoffse	t Offset in the subject at which to start matching
options	Option bits
ovector	Points to a vector of ints for result offsets
ovecsize	Number of elements in the vector (a multiple of 3)

The units for *length* and *startoffset* are bytes for **pcre_exec**(), 16-bit data items for **pcre16_exec**(), and 32-bit items for **pcre32_exec**(). The options are:

PCRE_ANCHOREDMatch only at the first positionPCRE_BSR_ANYCRLF\R matches only CR, LF, or CRLFPCRE_BSR_UNICODE\R matches all Unicode line endingsPCRE_NEWLINE_ANYRecognize any Unicode newline sequencePCRE_NEWLINE_ANYCRLFRecognize CR, LF, & CRLF as newline sequences

PCRE_NEWLINE_CR Recognize CR as the only newline sequence

PCRE_NEWLINE_CRLF Recognize CRLF as the only newline sequence

PCRE_NEWLINE_LF Recognize LF as the only newline sequence

PCRE_NOTBOL Subject string is not the beginning of a line

PCRE_NOTEOL Subject string is not the end of a line

PCRE_NOTEMPTY An empty string is not a valid match

PCRE_NOTEMPTY_ATSTART An empty string at the start of the subject is not a valid match

PCRE_NO_START_OPTIMIZE Do not do "start-match" optimizations

- PCRE_NO_UTF16_CHECK Do not check the subject for UTF-16 validity (only relevant if PCRE_UTF16 was set at compile time)
- PCRE_NO_UTF32_CHECK Do not check the subject for UTF-32 validity (only relevant if PCRE_UTF32 was set at compile time)
- PCRE_NO_UTF8_CHECK Do not check the subject for UTF-8 validity (only relevant if PCRE_UTF8 was set at compile time)

PCRE_PARTIAL) Return PCRE_ERROR_PARTIAL for a partial

PCRE_PARTIAL_SOFT) match if no full matches are found

PCRE_PARTIAL_HARD Return PCRE_ERROR_PARTIAL for a partial match if that is found before a full match

For details of partial matching, see the **pcrepartial** page. A **pcre_extra** structure contains the following fields:

flagsBits indicating which fields are setstudy_dataOpaque data from pcre[16|32]_study()match_limitLimit on internal resource usematch_limit_recursionLimit on internal recursion depthcallout_dataOpaque data passed back to calloutstablesPoints to character tables or is NULLmarkFor passing back a *MARK pointerexecutable jitOpaque data from JIT compilation

The flag bits are PCRE_EXTRA_STUDY_DATA, PCRE_EXTRA_MATCH_LIMIT, PCRE_EXTRA_MATCH_LIMIT_RECURSION, PCRE_EXTRA_CALLOUT_DATA, PCRE_EXTRA_TABLES, PCRE_EXTRA_MARK and PCRE_EXTRA_EXECUTABLE_JIT.

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.