NAME

PCRE2 - Perl-compatible regular expressions (revised API)

SYNOPSIS

#include <pcre2.h>

int pcre2_match(const pcre2_code ****code*, PCRE2_SPTR** *subject***,**
PCRE2_SIZE *length***, PCRE2_SIZE** *startoffset***,**
uint32_t *options***, pcre2_match_data ****match_data***,**
pcre2_match_context ****mcontext*);**

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 what it has matched and to captured substrings via the **match_data** block, which can be processed by functions with names that start with **pcre2_get_ovector_...()** or **pcre2_substring_...()**. The return from **pcre2_match()** is one more than the highest numbered capturing pair that has been set (for example, 1 if there are no captures), zero if the vector of offsets is too small, or a negative error code for no match and other errors. The function arguments are:

code Points to the compiled pattern
subject Points to the subject string
length Length of the subject string
startoffset Offset in the subject at which to start matching
options Option bits
match_data Points to a match data block, for results
mcontext Points to a match context, or is NULL

A match context is needed only if you want to:

Set up a callout function
Set a matching offset limit
Change the heap memory limit
Change the backtracking match limit
Change the backtracking depth limit
Set custom memory management specifically for the match

The *length* and *startoffset* values are code units, not characters. The length may be given as PCRE2_ZERO_TERMINATED for a subject that is terminated by a binary zero code unit. The options are:

PCRE2_ANCHORED Match only at the first position
PCRE2_COPY_MATCHED_SUBJECT
On success, make a private subject copy
PCRE2_ENDANCHORED Pattern can match only at end of subject
PCRE2_NOTBOL Subject string is not the beginning of a line
PCRE2_NOTEOL Subject string is not the end of a line
PCRE2_NOTEMPTY An empty string is not a valid match
PCRE2_NOTEMPTY_ATSTART An empty string at the start of the subject
is not a valid match
PCRE2_NO_JIT Do not use JIT matching
PCRE2_NO_UTF_CHECK Do not check the subject for UTF
validity (only relevant if PCRE2_UTF
was set at compile time)
PCRE2_PARTIAL_HARD Return PCRE2_ERROR_PARTIAL for a partial
match even if there is a full match

PCRE2_PARTIAL_SOFT Return PCRE2_ERROR_PARTIAL for a partial match if no full matches are found

For details of partial matching, see the **pcre2partial** page. There is a complete description of the PCRE2 native API in the **pcre2api** page and a description of the POSIX API in the **pcre2posix** page.