

NAME

PCRE2 - Perl-compatible regular expressions (revised API)

SYNOPSIS

```
#include <pcre2.h>
```

```
int pcre2_pattern_info(const pcre2_code *code, uint32_t what,
void *where);
```

DESCRIPTION

This function returns information about a compiled pattern. Its arguments are:

code Pointer to a compiled regular expression pattern
what What information is required
where Where to put the information

The recognized values for the *what* argument, and the information they request are as follows:

PCRE2_INFO_ALLOPTIONS Final options after compiling
PCRE2_INFO_ARGOPTIONS Options passed to **pcre2_compile()**
PCRE2_INFO_BACKREFMAX Number of highest backreference
PCRE2_INFO_BSR What \R matches:
 PCRE2_BSR_UNICODE: Unicode line endings
 PCRE2_BSR_ANYCRLF: CR, LF, or CRLF only
PCRE2_INFO_CAPTURECOUNT Number of capturing subpatterns
PCRE2_INFO_DEPTHLIMIT Backtracking depth limit if set,
 otherwise PCRE2_ERROR_UNSET
PCRE2_INFO_EXTRAOPTIONS Extra options that were passed in the
 compile context
PCRE2_INFO_FIRSTBITMAP Bitmap of first code units, or NULL
PCRE2_INFO_FIRSTCODETYPE Type of start-of-match information
 0 nothing set
 1 first code unit is set
 2 start of string or after newline
PCRE2_INFO_FIRSTCODEUNIT First code unit when type is 1
PCRE2_INFO_FRAME_SIZE Size of backtracking frame
PCRE2_INFO_HASBACKSLASHC Return 1 if pattern contains \C
PCRE2_INFO_HASCORRLF Return 1 if explicit CR or LF matches
 exist in the pattern
PCRE2_INFO_HEAPLIMIT Heap memory limit if set,

otherwise PCRE2_ERROR_UNSET

PCRE2_INFO_JCHANGED Return 1 if (?J) or (?-J) was used

PCRE2_INFO_JITSIZE Size of JIT compiled code, or 0

PCRE2_INFO_LASTCODETYPE Type of must-be-present information

0 nothing set

1 code unit is set

PCRE2_INFO_LASTCODEUNIT Last code unit when type is 1

PCRE2_INFO_MATCHEMPTY 1 if the pattern can match an empty string, 0 otherwise

PCRE2_INFO_MATCHLIMIT Match limit if set, otherwise PCRE2_ERROR_UNSET

PCRE2_INFO_MAXLOOKBEHIND Length (in characters) of the longest lookbehind assertion

PCRE2_INFO_MINLENGTH Lower bound length of matching strings

PCRE2_INFO_NAMECOUNT Number of named subpatterns

PCRE2_INFO_NAMEENTRYSIZE Size of name table entries

PCRE2_INFO_NAMETABLE Pointer to name table

PCRE2_CONFIG_NEWLINE Code for the newline sequence:

PCRE2_NEWLINE_CR

PCRE2_NEWLINE_LF

PCRE2_NEWLINE_CRLF

PCRE2_NEWLINE_ANY

PCRE2_NEWLINE_ANYCRLF

PCRE2_NEWLINE_NUL

PCRE2_INFO_RECURSIONLIMIT Obsolete synonym for PCRE2_INFO_DEPTHLIMIT

PCRE2_INFO_SIZE Size of compiled pattern

If *where* is NULL, the function returns the amount of memory needed for the requested information, in bytes. Otherwise, the *where* argument must point to an unsigned 32-bit integer (uint32_t variable), except for the following *what* values, when it must point to a variable of the type shown:

PCRE2_INFO_FIRSTBITMAP const uint8_t *

PCRE2_INFO_JITSIZE size_t

PCRE2_INFO_NAMETABLE PCRE2_SPTR

PCRE2_INFO_SIZE size_t

The yield of the function is zero on success or:

PCRE2_ERROR_NULL the argument *code* is NULL

PCRE2_ERROR_BADMAGIC the "magic number" was not found

PCRE2_ERROR_BADOPTION the value of *what* is invalid
PCRE2_ERROR_BADMODE the pattern was compiled in the wrong mode
PCRE2_ERROR_UNSET the requested information is not set

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.