## 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**pcr e2_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_FRAMESIZE Size of backtracking frame
PCRE2_INFO_HASBACKSLASHC Return 1 if pattern contains \C
PCRE2_INFO_HASCRORLF 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.