

**NAME**

PCRE - Perl-compatible regular expressions

**SYNOPSIS**

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

```
int pcre_jit_exec(const pcre *code, const pcre_extra *extra,
    const char *subject, int length, int startoffset,
    int options, int *ovector, int ovecsize,
    pcre_jit_stack *jstack);
```

```
int pcre16_jit_exec(const pcre16 *code, const pcre16_extra *extra,
    PCRE_SPTR16 subject, int length, int startoffset,
    int options, int *ovector, int ovecsize,
    pcre_jit_stack *jstack);
```

```
int pcre32_jit_exec(const pcre32 *code, const pcre32_extra *extra,
    PCRE_SPTR32 subject, int length, int startoffset,
    int options, int *ovector, int ovecsize,
    pcre_jit_stack *jstack);
```

**DESCRIPTION**

This function matches a compiled regular expression that has been successfully studied with one of the JIT options against a given subject string, using a matching algorithm that is similar to Perl's. It is a "fast path" interface to JIT, and it bypasses some of the sanity checks that **pcre\_exec()** applies. It returns offsets to captured substrings. Its arguments are:

<i>code</i>	Points to the compiled pattern
<i>extra</i>	Points to an associated <b>pcre[16 32]_extra</b> structure, or is NULL
<i>subject</i>	Points to the subject string
<i>length</i>	Length of the subject string, in bytes
<i>startoffset</i>	Offset in bytes in the subject at which to start matching
<i>options</i>	Option bits
<i>ovector</i>	Points to a vector of ints for result offsets
<i>ovecsize</i>	Number of elements in the vector (a multiple of 3)
<i>jstack</i>	Pointer to a JIT stack

The allowed options are:

**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\_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

However, the **PCRE\_NO\_UTF[8|16|32]\_CHECK** options have no effect, as this check is never applied. For details of partial matching, see the **pcrepartial** page. A **pcre\_extra** structure contains the following fields:

*flags*        Bits indicating which fields are set  
*study\_data*    Opaque data from **pcre[16|32]\_study()**  
*match\_limit*    Limit on internal resource use  
*match\_limit\_recursion* Limit on internal recursion depth  
*callout\_data*    Opaque data passed back to callouts  
*tables*        Points to character tables or is NULL  
*mark*         For passing back a \*MARK pointer  
*executable\_jit* Opaque 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 JIT API in the **pcrejit** page.