



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'memchr.3' command

\$ man memchr.3

MEMCHR(3) Linux Programmer's Manual MEMCHR(3)

NAME

memchr, memrchr, rawmemchr - scan memory for a character

SYNOPSIS

```
#include <string.h>

void *memchr(const void *s, int c, size_t n);

void *memrchr(const void *s, int c, size_t n);

void *rawmemchr(const void *s, int c);
```

Feature Test Macro Requirements for glibc (see feature_test_macros(7)):

```
memchr(), rawmemchr(): _GNU_SOURCE
```

DESCRIPTION

The `memchr()` function scans the initial `n` bytes of the memory area pointed to by `s` for the first instance of `c`. Both `c` and the bytes of the memory area pointed to by `s` are interpreted as unsigned char.

The `memrchr()` function is like the `memchr()` function, except that it searches backward from the end of the `n` bytes pointed to by `s` instead of forward from the beginning.

The `rawmemchr()` function is similar to `memchr()`: it assumes (i.e., the programmer knows for certain) that an instance of `c` lies somewhere in the memory area starting at the location pointed to by `s`, and so performs an optimized search for `c` (i.e., no use of a `count` argument to limit the range of the search). If an instance of `c` is not found, the results are unpredictable. The following call is a fast means of lo?

ating a string's terminating null byte:

```
char *p = rawmemchr(s, '\0');
```

RETURN VALUE

The memchr() and memrchr() functions return a pointer to the matching byte or NULL if the character does not occur in the given memory area.

The rawmemchr() function returns a pointer to the matching byte, if one is found. If no matching byte is found, the result is unspecified.

VERSIONS

rawmemchr() first appeared in glibc in version 2.1.

memrchr() first appeared in glibc in version 2.2.

ATTRIBUTES

For an explanation of the terms used in this section, see attributes(7).

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?Interface ? Attribute ? Value ?

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?memchr(), memrchr(), rawmemchr() ? Thread safety ? MT-Safe ?

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CONFORMING TO

memchr(): POSIX.1-2001, POSIX.1-2008, C89, C99, SVr4, 4.3BSD.

The memrchr() function is a GNU extension, available since glibc 2.1.91.

The rawmemchr() function is a GNU extension, available since glibc 2.1.

SEE ALSO

bstring(3), ffs(3), index(3), memmem(3), rindex(3), strchr(3), strp?

brk(3), strrchr(3), strsep(3), strspn(3), strstr(3), wmemchr(3)

COLOPHON

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