NAME

mempcpy, wmempcpy − copy memory area

LIBRARY

Standard C library (*libc*, *−lc*)

SYNOPSIS

```
#define _GNU_SOURCE         /* See feature_test_macros(7) */
#include <string.h>

void *mempcpy(void dest[restrict .n], const void src[restrict .n],
        size_t n);

#define _GNU_SOURCE         /* See feature_test_macros(7) */
#include <wchar.h>

wchar_t *wmempcpy(wchar_t dest[restrict .n],
        const wchar_t src[restrict .n],
        size_t n);
```

DESCRIPTION

The **mempcpy**() function is nearly identical to the **memcpy**(3) function. It copies *n* bytes from the object beginning at *src* into the object pointed to by *dest*. But instead of returning the value of *dest* it returns a pointer to the byte following the last written byte.

This function is useful in situations where a number of objects shall be copied to consecutive memory positions.

The **wmempcpy**() function is identical but takes *wchar_t* type arguments and copies *n* wide characters.

RETURN VALUE

dest + *n*.

VERSIONS

mempcpy() first appeared in glibc 2.1.

ATTRIBUTES

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

Interface	Attribute	Value
mempcpy(), **wmempcpy**()	Thread safety	MT-Safe

STANDARDS

This function is a GNU extension.

EXAMPLES

```
void *
combine(void *o1, size_t s1, void *o2, size_t s2)
{
    void *result = malloc(s1 + s2);
    if (result != NULL)
        mempcpy(mempcpy(result, o1, s1), o2, s2);
    return result;
}
```

SEE ALSO

memccpy(3), **memcpy**(3), **memmove**(3), **wmemcpy**(3)