



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'bswap_32.3' command

\$ man bswap_32.3

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

NAME

bswap_16, bswap_32, bswap_64 - reverse order of bytes

SYNOPSIS

```
#include <byteswap.h>
```

```
bswap_16(x);
```

```
bswap_32(x);
```

```
bswap_64(x);
```

DESCRIPTION

These macros return a value in which the order of the bytes in their 2-, 4-, or 8-byte arguments is reversed.

RETURN VALUE

These macros return the value of their argument with the bytes reversed.

ERRORS

These macros always succeed.

CONFORMING TO

These macros are GNU extensions.

EXAMPLES

The program below swaps the bytes of the 8-byte integer supplied as its command-line argument. The following shell session demonstrates the use of the program:

```
$ ./a.out 0x0123456789abcdef
```

0x123456789abcdef ==> 0xefcdab8967452301

Program source

```
#include <stdio.h>
#include <stdint.h>
#include <stdlib.h>
#include <inttypes.h>
#include <byteswap.h>

int
main(int argc, char *argv[])
{
    uint64_t x;
    if (argc != 2) {
        fprintf(stderr, "Usage: %s <num>\n", argv[0]);
        exit(EXIT_FAILURE);
    }
    x = strtoull(argv[1], NULL, 0);
    printf("%#" PRIx64 " ==> %" PRIx64 "\n", x, bswap_64(x));
    exit(EXIT_SUCCESS);
}
```

SEE ALSO

byteorder(3), endian(3)

COLOPHON

This page is part of release 5.10 of the Linux man-pages project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.

Linux

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