



Rocky Enterprise Linux 9.2 Manual Pages on command 'cacheflush.2'

C:\>man cacheflush.2

CACHEFLUSH(2) Linux Programmer's Manual CACHEFLUSH(2)

NAME

cacheflush - flush contents of instruction and/or data cache

SYNOPSIS

```
#include <asm/cachectl.h>
```

```
int cacheflush(char *addr, int nbytes, int cache);
```

DESCRIPTION

cacheflush() flushes the contents of the indicated cache(s) for the user addresses

in the range `addr` to `(addr+nbytes-1)`. `cache` may be one of:

ICACHE Flush the instruction cache.

DCACHE Write back to memory and invalidate the affected valid cache lines.

BCACHE Same as (ICACHE|DCACHE).

RETURN VALUE

cacheflush() returns 0 on success or -1 on error. If errors are detected, `errno` will indicate the error.

ERRORS

EFAULT Some or all of the address range `addr` to `(addr+nbytes-1)` is not accessible.

EINVAL `cache` is not one of ICACHE, DCACHE, or BCACHE (but see BUGS).

CONFORMING TO

Historically, this system call was available on all MIPS UNIX variants including RISC/os, IRIX, Ultrix, NetBSD, OpenBSD, and FreeBSD (and also on some non-UNIX MIPS operating systems), so that the existence of this call in MIPS operating systems is

a de-facto standard.

Caveat

cacheflush() should not be used in programs intended to be portable. On Linux, this call first appeared on the MIPS architecture, but nowadays, Linux provides a cacheflush() system call on some other architectures, but with different arguments.

BUGS

Linux kernels older than version 2.6.11 ignore the addr and nbytes arguments, making this function fairly expensive. Therefore, the whole cache is always flushed.

This function always behaves as if BCACHE has been passed for the cache argument and does not do any error checking on the cache argument.

COLOPHON

This page is part of release 5.05 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/>.

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