

NAME

memcontrol - control system cache behaviour with respect to memory

SYNOPSIS

memcontrol list [-a]

memcontrol set -b *base* -l *length* -o *owner attribute*

memcontrol clear -o *owner*

memcontrol clear -b *base* -l *length*

DESCRIPTION

A number of supported system architectures allow the behaviour of the CPU cache to be programmed to behave differently depending on the region being written.

The **memcontrol** utility provides an interface to this facility, allowing CPU cache behavior to be altered for ranges of system physical memory.

These ranges are typically power-of-2 aligned and sized, however the specific rules governing their layout vary between architectures. The **memcontrol** utility does not attempt to enforce these rules, however the system will reject any attempt to set an illegal combination.

list List range slots.

-a List all range slots, even those that are inactive.

set Set memory range attributes.

-b *base*

Memory range base address.

-l *length*

Length of memory range in bytes, power of 2.

-o *owner*

Text identifier for this setting (7 char max).

attribute

Attributes applied to this range; combinations of **force**, **uncacheable**, **write-combine**, **write-through**, **write-back**, and **write-protect**.

clear Clear memory range attributes. Ranges may be cleared by owner or by base/length combination.

To clear based on ownership:

-o *owner*

All ranges with this owner will be cleared.

To clear based on the base/length combination:

-b *base*

Memory range base address.

-l *length*

Length of memory range in bytes, power of 2.

Base and length must exactly match an existing range.

SEE ALSO

mem(4)