NAME

pmc_disable, **pmc_enable** - administrative control of hardware performance counters

LIBRARY

Performance Counters Library (libpmc, -lpmc)

SYNOPSIS

#include <pmc.h>

int
pmc_disable(*int cpu*, *int pmc*);

int
pmc_enable(*int cpu*, *int pmc*);

DESCRIPTION

These functions allow specific hardware performance monitoring counters in a system to be disabled and enabled administratively. The hardware performance counters available on each CPU are numbered using small non-negative integers, in a system dependent manner. Disabled counters will not be available to applications for use.

The invoking process needs to have the PRIV_PMC_MANAGE privilege to perform these operations.

Function **pmc_disable**() disables the hardware counter numbered by argument *pmc* on CPU number *cpu*.

Function **pmc_enable**() enables the hardware counter numbered by argument *pmc* on CPU number *cpu*.

IMPLEMENTATION NOTES

Hardware PMCs that are currently in use by applications cannot be disabled. Allocation of a process scope software PMC marks all hardware PMCs in the system with the same pmc number as being in-use.

RETURN VALUES

Upon successful completion, the value 0 is returned; otherwise the value -1 is returned and the global variable *errno* is set to indicate the error.

ERRORS

A call to these functions may fail with the following errors:

[EBUSY] Function **pmc_disable**() specified a hardware PMC is currently in use.

[EINVAL] Arguments *cpu* or *pmc* were invalid.

[ENXIO] Argument *cpu* specified a disabled or absent CPU.

[EPERM] The current process lacks sufficient privilege to perform this operation.

SEE ALSO

pmc(3), pmc_cpuinfo(3), pmc_pmcinfo(3), hwpmc(4), pmccontrol(8), priv_check(9)