

NAME

sysctlmib — Kernel Sysctl MIB Information

DESCRIPTION

The FreeBSD `sysctl` database allows one to manipulate and monitor various subsystems in the kernel. Nodes can be added and removed dynamically without any type of recompilation needed, unless the actual ABI changes.

From a programming perspective, it is better to get values from the `sysctl(3)` database than to use the infamous KVM interface.

This manual page contains a comprehensively described list of the sysctls available at hand on FreeBSD.

SYSCTL LIST**vm.vmtotal**

System virtual memory statistics.

vm.loadavg

Machine loadaverage history.

vm.v_free_min

No explanation provided, as of yet.

vm.v_free_target

No explanation provided, as of yet.

vm.v_free_reserved

No explanation provided, as of yet.

vm.v_inactive_target

No explanation provided, as of yet.

vm.v_cache_min

No explanation provided, as of yet.

vm.v_cache_max

No explanation provided, as of yet.

vm.v_pageout_free_min

No explanation provided, as of yet.

vm.pageout_algorithm

LRU page mgmt.

vm.swap_enabled

Enable entire process swapout.

vm.swap_async_max

Maximum running async swap ops.

vm.dnmax

Maximum size of a swap block.

vm.nswapdev

Number of swap devices.

vm.swap_info

Swap statistics by device.

vm.swap_idle_threshold1

Guaranteed swapped in time for a process.

vm.swap_idle_threshold2

Time before a process will be swapped out.

vm.v_free_severe

No explanation provided, as of yet.

vm.stats.sys.v_swch

Context switches.

vm.stats.sys.v_trap

Traps.

vm.stats.sys.v_syscall

Syscalls.

vm.stats.sys.v_intr

Hardware interrupts.

vm.stats.sys.v_soft

Software interrupts.

vm.stats.vm.v_vm_faults

VM faults.

vm.stats.vm.v_cow_faults

COW faults.

vm.stats.vm.v_cow_optim

Optimized COW faults.

vm.stats.vm.v_zfod

Zero fill.

vm.stats.vm.v_ozfod

Optimized zero fill.

vm.stats.vm.v_swapin

Swapin operations.

vm.stats.vm.v_swapout

Swapout operations.

vm.stats.vm.v_swappgsin

Swapin pages.

vm.stats.vm.v_swappgsout

Swapout pages.

vm.stats.vm.v_vnodein

Vnodein operations.

vm.stats.vm.v_vnodeout

Vnodeout operations.

vm.stats.vm.v_vnodepgsin

Vnodein pages.

vm.stats.vm.v_vnodepgsout

Vnodeout pages.

vm.stats.vm.v_intrans

In transit page blocking.

vm.stats.vm.v_reactivated

Reactivated pages.

vm.stats.vm.v_pdwakeups

Pagedaemon wakeups.

vm.stats.vm.v_pdpages

Pagedaemon page scans.

vm.stats.vm.v_dfree

No explanation provided, as of yet.

vm.stats.vm.v_pfree

No explanation provided, as of yet.

vm.stats.vm.v_tfree

No explanation provided, as of yet.

vm.stats.vm.v_page_size

No explanation provided, as of yet.

vm.stats.vm.v_page_count

No explanation provided, as of yet.

vm.stats.vm.v_free_reserved

No explanation provided, as of yet.

vm.stats.vm.v_free_target

No explanation provided, as of yet.

vm.stats.vm.v_free_min

No explanation provided, as of yet.

vm.stats.vm.v_free_count

No explanation provided, as of yet.

vm.stats.vm.v_wire_count

No explanation provided, as of yet.

vm.stats.vm.v_active_count

No explanation provided, as of yet.

vm.stats.vm.v_inactive_target

No explanation provided, as of yet.

vm.stats.vm.v_inactive_count

No explanation provided, as of yet.

vm.stats.vm.v_cache_count

No explanation provided, as of yet.

vm.stats.vm.v_cache_min

No explanation provided, as of yet.

vm.stats.vm.v_cache_max

No explanation provided, as of yet.

vm.stats.vm.v_pageout_free_min

No explanation provided, as of yet.

vm.stats.vm.v_interrupt_free_min

No explanation provided, as of yet.

vm.stats.vm.v_forks

Number of fork() calls.

vm.stats.vm.v_vforks

Number of vfork() calls.

vm.stats.vm.v_rforks

Number of rfork() calls.

vm.stats.vm.v_kthreads

Number of fork() calls by kernel.

vm.stats.vm.v_forkpages

VM pages affected by fork().

vm.stats.vm.v_vforkpages

VM pages affected by vfork().

vm.stats.vm.v_rforkpages

VM pages affected by rfork().

vm.stats.vm.v_kthreadpages

VM pages affected by fork() by kernel.

vm.stats.misc.zero_page_count

No explanation provided, as of yet.

vm.stats.misc.cnt_prezero

No explanation provided, as of yet.

vm.max_proc_mmap

No explanation provided, as of yet.

vm.msync_flush_flags

No explanation provided, as of yet.

vm.idlezero_enable

No explanation provided, as of yet.

vm.idlezero_maxrun

No explanation provided, as of yet.

vm.max_laundry

Limit dirty flushes in pageout.

vm.pageout_stats_max

Max pageout stats scan length.

vm.pageout_full_stats_interval

Interval for full stats scan.

vm.pageout_stats_interval

Interval for partial stats scan.

vm.pageout_stats_free_max

Not implemented.

vm.swap_idle_enabled

Allow swapout on idle criteria.

vm.defer_swapspace_pageouts

Give preference to dirty pages in mem.

vm.disable_swapspace_pageouts

Disallow swapout of dirty pages.

vm.pageout_lock_miss

vget() lock misses during pageout.

vm.zone

Zone Info.

vm.kvm_size

Size of KVM.

vm.kvm_free

Amount of KVM free.

SEE ALSO

`sysctl(8)`

AUTHORS

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