

NAME

swapon, **swapoff**, **swapctl** - specify devices for paging and swapping

SYNOPSIS

swapon [-F *fstab*] -aLq | -E *file* ...

swapoff [-F *fstab*] -aLq | *file* ...

swapctl [-AfghklmsU] [-a *file* ... | -d *file* ...]

DESCRIPTION

The **swapon**, **swapoff** and **swapctl** utilities are used to control swap devices in the system. At boot time all swap entries in */etc/fstab* are added automatically when the system goes multi-user. Swap devices use a fixed interleave; the maximum number of devices is unlimited. There is no priority mechanism.

The **swapon** utility adds the specified swap devices to the system. If the -a option is used, all swap devices in */etc/fstab* will be added, unless their "noauto" or "late" option is also set. If the -L option is specified, swap devices with the "late" option will be added as well as ones with no option. If the -q option is used, informational messages will not be written to standard output when a swap device is added. The -E option causes each of following devices to receive a BIO_DELETE command. This command marks the device's blocks as unused, except those that might store a disk label. This marking can erase a crash dump. To delay **swapon** for a device until after **savecore** has copied the crash dump to another location, use the "late" option.

The **swapoff** utility removes the specified swap devices from the system. If the -a option is used, all swap devices in */etc/fstab* will be removed, unless their "noauto" option is also set. If the -L option is specified, only swap devices with the "late" option will be removed. If the -q option is used, informational messages will not be written to standard output when a swap device is removed. Note that **swapoff** will fail and refuse to remove a swap device if a very conservative check does not conclude that there is sufficient VM (memory + remaining swap devices) to run the system. The -f option turns off this check, which could deadlock the system if there is insufficient swap space remaining.

The **swapoff** utility must move swapped pages out of the device being removed which could lead to high system loads for a period of time, depending on how much data has been swapped out to that device.

Other options supported by both **swapon** and **swapoff** are as follows:

-F *fstab*

Specify the *fstab* file to use (in conjunction with -a).

The **swapctl** utility exists primarily for those familiar with other BSDs and may be used to add, remove, or list swap devices. Note that the -a option is used differently in **swapctl** and indicates that a specific

list of devices should be added. The **-d** option indicates that a specific list should be removed. The **-A** and **-U** options to **swaptctl** operate on all swap entries in */etc/fstab* which do not have their "noauto" option set.

Swap information can be generated using the **swapinfo(8)** utility, **pstat -s**, or **swaptctl -l**. The **swaptctl** utility has the following options for listing swap:

- h** Output values in human-readable form.
- g** Output values in gigabytes.
- k** Output values in kilobytes.
- m** Output values in megabytes.
- l** List the devices making up system swap.
- s** Print a summary line for system swap.

The **BLOCKSIZE** environment variable is used if not specifically overridden. 512 byte blocks are used by default.

FILES

/dev/{ada,da}?s?b standard paging devices
/dev/md? memory disk devices
/etc/fstab ASCII file system description table

DIAGNOSTICS

These utilities may fail for the reasons described in **swapon(2)**.

SEE ALSO

swapon(2), **fstab(5)**, **init(8)**, **mdconfig(8)**, **pstat(8)**, **rc(8)**

HISTORY

The **swapon** utility appeared in 4.0BSD. The **swapoff** and **swaptctl** utilities appeared in FreeBSD 5.1.