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### ***Rocky Enterprise Linux 9.2 Manual Pages on command 'mkswap.8'***

***\$ man mkswap.8***

MKSWAP(8)                      System Administration                      MKSWAP(8)

#### NAME

mkswap - set up a Linux swap area

#### SYNOPSIS

mkswap [options] device [size]

#### DESCRIPTION

mkswap sets up a Linux swap area on a device or in a file.

The device argument will usually be a disk partition (something like /dev/sdb7) but can also be a file. The Linux kernel does not look at partition IDs, but many installation scripts will assume that partitions of hex type 82 (LINUX\_SWAP) are meant to be swap partitions. (Warning: Solaris also uses this type. Be careful not to kill your Solaris partitions.)

The size parameter is superfluous but retained for backwards compatibility. (It specifies the desired size of the swap area in 1024-byte blocks. mkswap will use the entire partition or file if it is omitted. Specifying it is unwise - a typo may destroy your disk.)

After creating the swap area, you need the swapon command to start using it. Usually swap areas are listed in /etc/fstab so that they can be taken into use at boot time by a swapon -a command in some boot script.

#### WARNING

The swap header does not touch the first block. A boot loader or disk label can be there, but it is not a recommended setup. The recommended setup is to use a separate partition for a Linux swap area.

mkswap, like many others mkfs-like utils, erases the first partition block to make any previous filesystem invisible.

However, mkswap refuses to erase the first block on a device with a disk label (SUN, BSD, ...).

## OPTIONS

**-c, --check**

Check the device (if it is a block device) for bad blocks before creating the swap area. If any bad blocks are found, the count is printed.

**-f, --force**

Go ahead even if the command is stupid. This allows the creation of a swap area larger than the file or partition it resides on.

Also, without this option, mkswap will refuse to erase the first block on a device with a partition table.

**-L, --label label**

Specify a label for the device, to allow swapon by label.

**--lock[=mode]**

Use exclusive BSD lock for device or file it operates. The optional argument mode can be yes, no (or 1 and 0) or nonblock. If the mode argument is omitted, it defaults to "yes". This option overwrites environment variable \$LOCK\_BLOCK\_DEVICE. The default is not to use any lock at all, but it's recommended to avoid collisions with udevd or other tools.

**-p, --pagesize size**

Specify the page size (in bytes) to use. This option is usually unnecessary; mkswap reads the size from the kernel.

**-U, --uuid UUID**

Specify the UUID to use. The default is to generate a UUID.

**-v, --swapversion 1**

Specify the swap-space version. (This option is currently pointless, as the old -v 0 option has become obsolete and now only -v 1 is supported. The kernel has not supported v0 swap-space format since 2.5.22 (June 2002). The new version v1 is supported since 2.1.117 (August 1998).)

**--verbose**

Verbose execution. With this option mkswap will output more details about detected

problems during swap area set up.

-h, --help

Display help text and exit.

-V, --version

Display version information and exit.

## ENVIRONMENT

LIBBLKID\_DEBUG=all

enables libblkid debug output.

LOCK\_BLOCK\_DEVICE=<mode>

use exclusive BSD lock. The mode is "1" or "0". See --lock for more details.

## NOTES

The maximum useful size of a swap area depends on the architecture and the kernel version.

The maximum number of the pages that is possible to address by swap area header is 4294967295 (32-bit unsigned int). The remaining space on the swap device is ignored.

Presently, Linux allows 32 swap areas. The areas in use can be seen in the file /proc/swaps.

mkswap refuses areas smaller than 10 pages.

If you don't know the page size that your machine uses, you may be able to look it up with `cat /proc/cpuinfo` (or you may not - the contents of this file depend on architecture and kernel version).

To set up a swap file, it is necessary to create that file before initializing it with `mkswap`, e.g. using a command like

```
# dd if=/dev/zero of=swapfile bs=1MiB count=$((8*1024))
```

to create 8GiB swapfile.

Please read notes from `swapon(8)` about the swap file use restrictions (holes, preallocation and copy-on-write issues).

## SEE ALSO

`fdisk(8)`, `swapon(8)`

## REPORTING BUGS

For bug reports, use the issue tracker at <https://github.com/karelzak/util-linux/issues>.

## AVAILABILITY

The `mkswap` command is part of the `util-linux` package which can be downloaded from Linux Kernel Archive <<https://www.kernel.org/pub/linux/utils/util-linux/>>.

