



### ***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 `udev` 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/>>.

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