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Linux add a swap file howto

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Q. I need additional swap space to improve my system performance. How do I add a swap file to Linux system?

A. In Linux, as in most other Unix-like operating systems, it is common to use a whole partition of a hard disk for swapping. However, with the 2.6 Linux kernel, swap files are just as fast[7] as swap partitions, although Red Hat recommends using a swap partition. The administrative flexibility of swap files outweighs that of partitions; since modern high capacity hard drives can remap physical sectors, no partition is guaranteed to be contiguous. You can add swap file as a dedicated partition or use following instructions to create a swap file.

[1]

Procedure to add a swap file

You need to use dd command to create swapfile. Next you need to use mkswap command to set up a Linux swap area on a device or in a file.

a) Login as the root user

b) Type following command to create 512MB swap file (1024 * 512MB = 524288 block size):

```
# dd if=/dev/zero of=/swapfile1 bs=1024 count=524288
```

c) Set up a Linux swap area:

```
# mkswap /swapfile1
```

d) Activate /swapfile1 swap space immediately:

```
# swapon /swapfile1
```

e) To activate /swapfile1 after Linux system reboot, add entry to /etc/fstab file. Open this file using text editor such as vi:

```
# vi /etc/fstab
```

Append following line:

```
/swapfile1 swap swap defaults 0 0
```

So next time Linux comes up after reboot, it enables the new swap file for you automatically.

g) How do I verify swap is activated or not?
Simply use free command:

```
$ free -m
```

See also:

- Linux display system hardware status information gathered from /proc filesystem in easy format (includes swap info) [2]

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[1] Image: **http://www.cyberciti.biz/faq/faq/category/linux/**
[2] Linux display system hardware status information gathered from /proc filesystem in easy format (includes swap info):
http://www.cyberciti.biz/faq/tips/linux-display-system-hardware-status-information-gathered-from-proc-filesystem-in-easy-format.html