

# Create swape file

Tuto from [itsfoss.com](https://itsfoss.com) and [linuxhandbook.com](https://linuxhandbook.com).

## Check swap space in Linux

```
$ free -h
```

	total	used	free	shared	buff/cache	available
Mem:	1,7Gi	844Mi	321Mi	18Mi	603Mi	759Mi
Swap:	0B	0B	0B			

*There is no swap space.*

## Make a new swap file

1. Use the `fallocate` command to create a file of size 1 GB.
2. It is recommended to allow only root to read and write to the swap file.

```
$ sudo fallocate -l 1G /swapfile  
$ sudo chmod 600 /swapfile
```

“ The name of the swap file could be anything.

## Mark the new file as swap space

```
$ sudo mkswap /swapfile
```

Configure l'espace d'échange (swap) en version 1, taille = 1024 MiB (1073737728 octets)  
pas d'étiquette, UUID=3bbb4a53-e2a4-495f-8e42-d7cb43e6ad40

# Enable the swap file

1. Enable the swap file.
2. Check the swap space.

```
$ sudo swapon /swapfile
$ swapon --show
NAME      TYPE  SIZE USED PRIO
/swapfile file 1024M  0B   -2
```

## Make the changes permanent

1. It's always a good idea to make a backup before make any changes to the `/etc/fstab` file.
2. Add the line to the end of `/etc/fstab` file.

```
$ sudo cp /etc/fstab /etc/fstab.back
```

## Change Swapiness kernel parameter

### Temporary change

Check *swappiness*:

```
cat /proc/sys/vm/swappiness
```

Change setting:

```
sudo sysctl vm.swappiness=10
```

### Persistent change

Edit the config file:

```
sudo vim /etc/sysctl.conf
```

Set swappiness:

```
# /etc/sysctl.conf  
vm.swappiness=10
```

Reload *sysctl*:

```
sudo sysctl -p
```

## [Bonus] Resize swap file

Make sure the swapfile is on the system and not a swap partition.

```
$ swapon --show  
NAME      TYPE SIZE USED PRIO  
/swapfile file  1G   0B   -2
```

Now before you resize the swap file, you should turn the swap off.

You should also make sure that you have enough free RAM available to take the data from swap file.

Otherwise, create a temporary swap file.

A solution to clear swapfile is to reboot the system...

Disable the swapfile.

```
$ sudo swapoff /swapfile
```

Now, use the *fallocate* to change the size of the swap file.

```
$ sudo fallocate -l 2G /swapfile
```

Mark the file as a swap file.

```
$ sudo mkswap /swapfile  
mkswap: /swapfile : avertissement : effacement de l'ancienne signature swap.  
Configure l'espace d'échange (swap) en version 1, taille = 2 GiB (2147479552 octets)  
pas d'étiquette, UUID=bf273c02-f44a-48ef-9b04-b212d9003a4a
```

Enable the swap file.

```
$ sudo swapon /swapfile
```

Check!

```
$ free -h
```

	total	used	free	shared	buff/cache	available
Mem:	1,7Gi	1,0Gi	138Mi	65Mi	619Mi	541Mi
Swap:	2,0Gi	0,0Ki	2,0Gi			

---

Révision #4

Créé 5 juin 2021 14:04:17 par Mickaël G.

Mis à jour 24 septembre 2023 13:15:44 par Mickaël G.